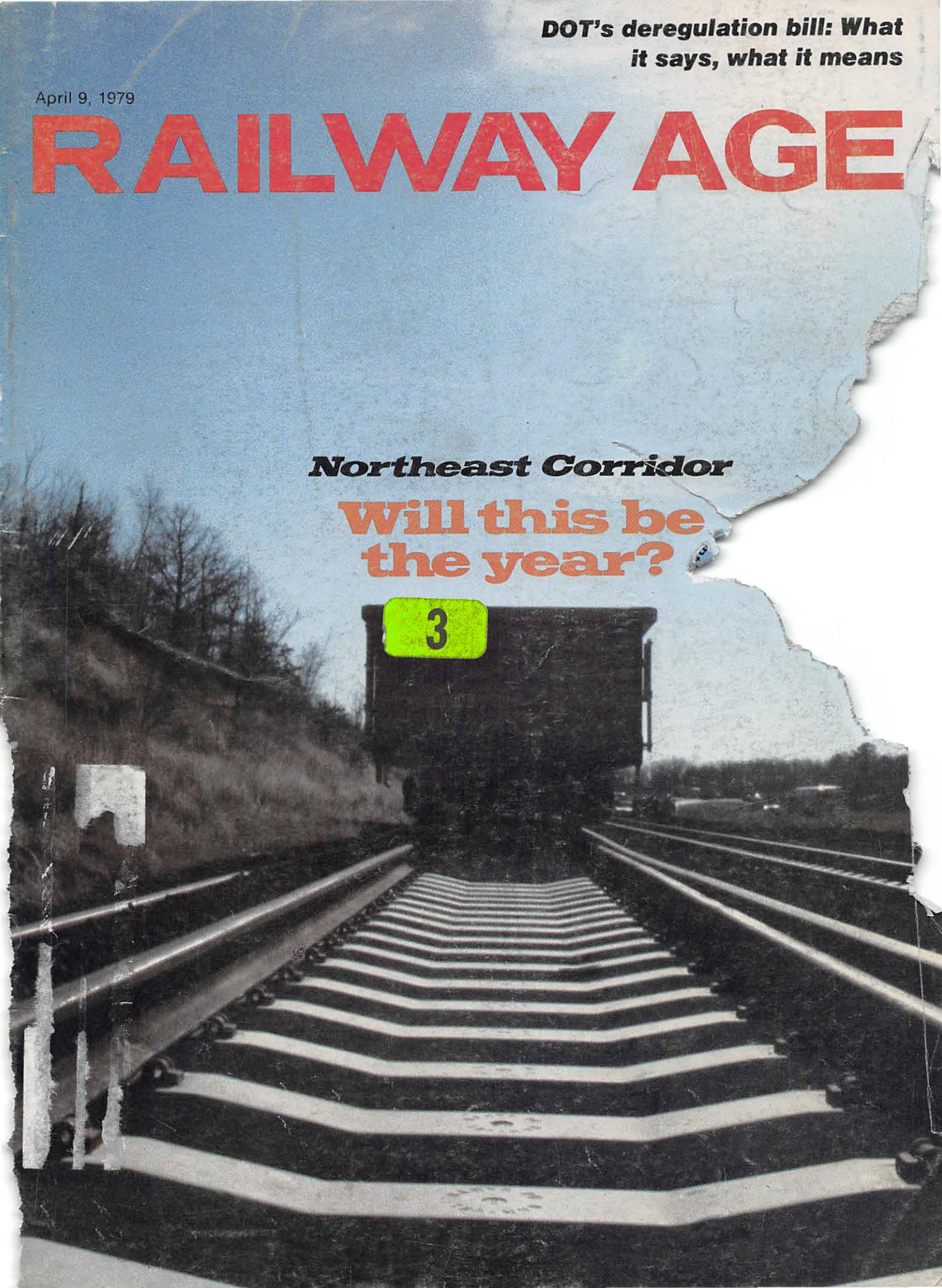
DOT's deregulation bill: What it says, what it means

April 9, 1979

RAILWAY AGE

Northeast Corridor

Will this be the year?



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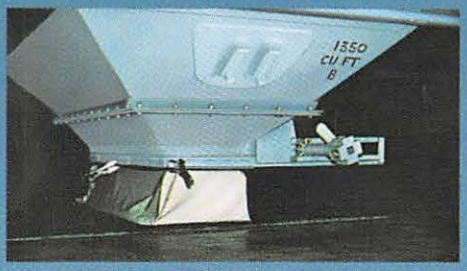

Center sill-less design allows cement to unload rapidly from the CF 2700.

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LT WT 54600 NEW 6-76
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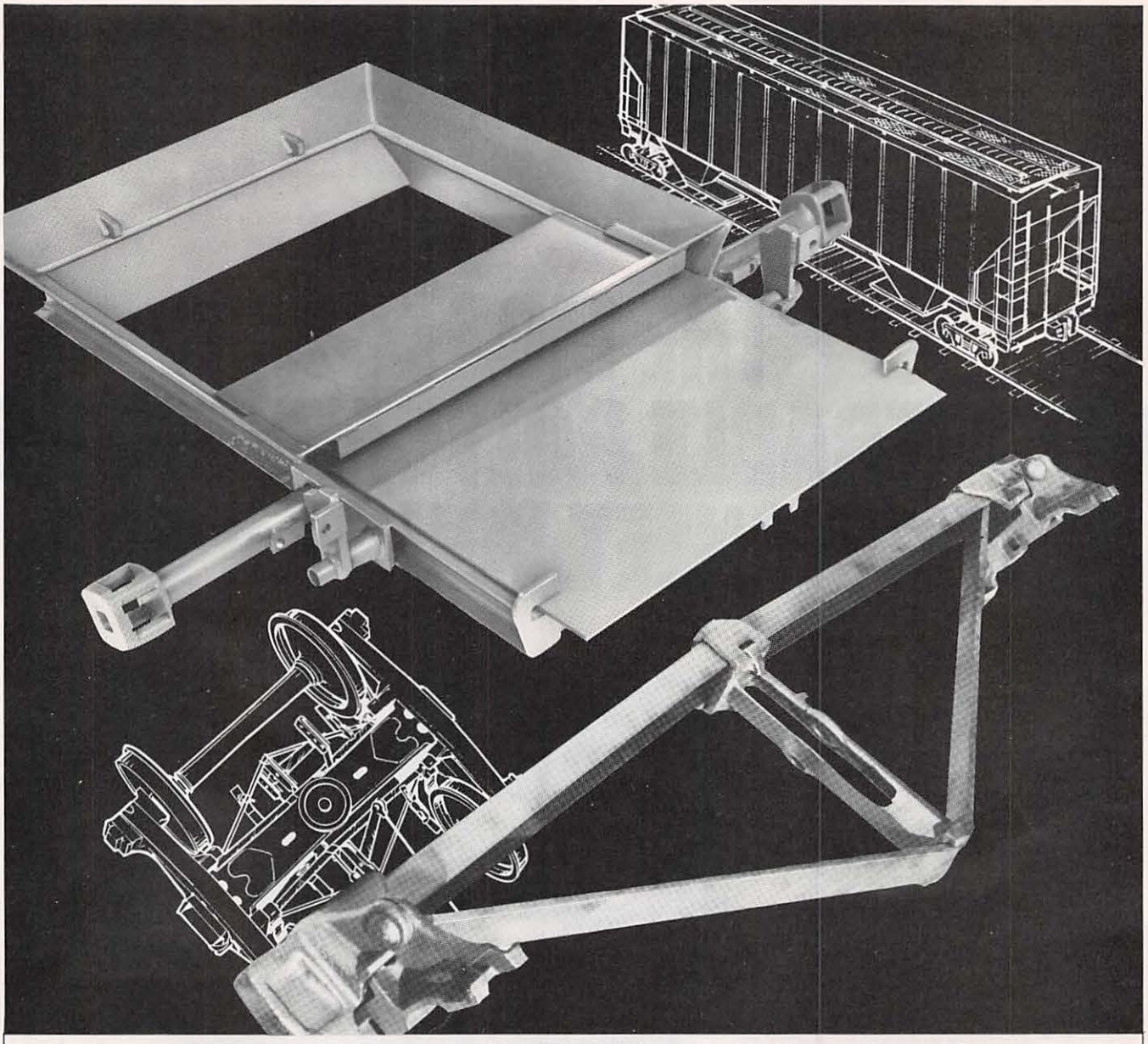

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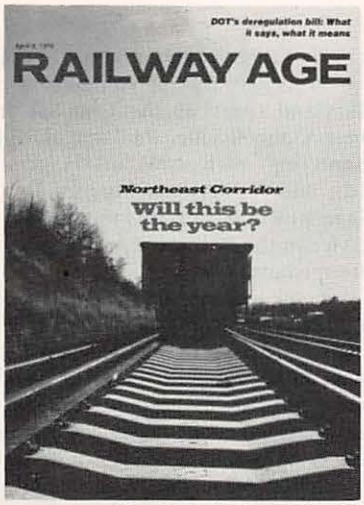
RAILWAY AGE

April 9, 1979

FEATURES



Cover article, page 24

20 Deregulation: DOT bill isn't quite the ticket

Railroad reaction to the Department of Transportation's deregulation proposals was mixed. AAR's Dempsey, SP's Biaggini, and NW's Fishwick comment on the key provisions.

24 For troubled NECIP, the track gets smoother

Amtrak's Northeast Corridor Improvement Project is behind schedule, growing costlier, and under investigation, but after months of failure, frustration, and underfunding, both administration and accomplishment now seem to be on a steadier course.

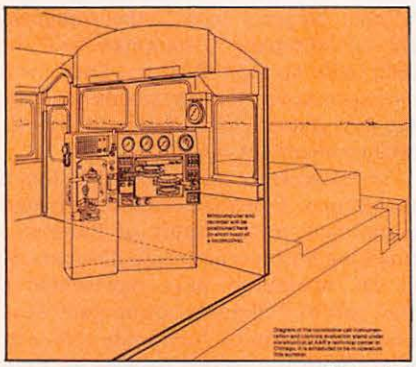
28 Alaska Railroad: The road to recovery

ARR fortunes rose with the pipeline construction boom, then sagged when the boom ended. Now, amid threats of abandonment or sale, demands for extension to the lower 48, and administrative pressures from its government owner, the railroad is striving to break even again in 1980.

34 In-cab computer is on the way

To prove out the benefits of a computer in the locomotive, AAR expects to be operating its cab instrumentation and controls evaluation stand by summer.

Page 28



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COVER: Newly laid concrete ties and cwr in the wake of Amtrak's track-laying machine (photo by Fred DeMers, Amtrak staff photographer.)

What Southern and NW want from CSX

What do Southern Railway and Norfolk & Western want if the Interstate Commerce Commission approves the merger of the Chessie System and Family Lines? Plenty.

Both Southern and NW announced March 19th the principal conditions they want included in any ICC approval of the proposed merger, to protect (1) the public interest in balanced competitive rail systems, and (2) their own private interests, which they see severely threatened by the proposed new CSX Corp.

Southern wants the following properties, to be sold to it either directly or indirectly for cash:

—All properties of the Monon Railroad as constituted immediately prior to its merger into the Louisville & Nashville in 1971, including the former Monon's interest in and rights to operate in Chicago over properties of the Belt Railway Company of Chicago and the Chicago & Western Indiana.

—Perpetual trackage rights over the Baltimore & Ohio Terminal railroad for access to key connections.

—The stock and other ownership interests of the B&O and the L&N at Louisville in the Kentucky & Indiana Terminal railroad.

—All lines constituting L&N's Cumberland Valley subdivision in Eastern Kentucky.

—The Seaboard (former Atlantic Coast Line) line from Jacksonville to Tampa via Orlando, including Uceta yard, and a half interest in all other SCL lines and facilities constituting the Tampa division.

—B&O's 50% stock interest in the Detroit, Toledo & Ironton, should the ICC approve the joint NW-B&O application to acquire control of the DT&I.

Southern said that without these six conditions, it would have no choice but to oppose the proposed merger. A formal application setting forth in greater detail Southern's conditions and reasons will be filed with the ICC by the deadline of May 16.

By acquiring entry into the Eastern Kentucky coal fields, now served only by Chessie and L&N, Southern says it seeks to prevent the monopoly of Eastern Kentucky coal shipping that CSX would create. Southern said the solution to L&N's "well-publicized" difficulties with equipment and track for coal service lies in introducing "real railroad competition" to the area, "not in strengthening an existing monopoly nor creating an even stronger one."

And that is basically the gist of NW's proposed conditions, too. It wants to acquire:

—SCL's interest in the Clinchfield, which runs between Elkhorn City, Ky., and Spartanburg, S.C.

—Rights to serve coal properties in Eastern Kentucky in the Harlan-Middlesboro coal regions currently served by the L&N.

—SCL's half interest in the Winston-Salem Southbound Railway, running from Winston-Salem, N.C. to Wadesboro, N.C. (the other half is already NW-owned).

—Chessie's interest in the Detroit, Toledo & Ironton (NW and Chessie have pending before the ICC a request for approval of their joint purchase of DT&I).

—Trackage rights over the Western Maryland (part of the Chessie) (1) between Connellsville, Pa., and Baltimore, connecting with NW at Hagerstown, Md., and (2) between Lurgan, Pa., and Hagerstown, with rights to perform local service in the Baltimore area and at some intermediate points.

—Trackage rights at several other points to facilitate NW operations.

In Chessie's 1978 annual report, Chairman and President Hays T. Watkins points out that under new rules, the ICC must deliver a final decision on the merger by Aug. 14, 1981, but he says the companies hope for a decision much sooner. "The situation of the railroad industry generally, but most particularly in the Northeast, gets no better as time passes," Watkins says.

Pullman gives up on passenger cars

It was the kind of announcement easily misconstrued, and Chicago area radio stations did their best to do just that. Early risers March 22 were told by, among others, all-news WBBM that Pullman's last railroad car would soon be built. There was no mention of a record backlog of freight car orders.

What Pullman was trying to tell the world was that its board of directors the day before had decided the company should withdraw from its rail passenger car business "as soon as practicable," upon completion of contracts already signed.

Pullman management had decided that resources employed in passenger car production should be "redeployed" on a profitable basis in other company lines, a statement said. The decision to discontinue the passenger car business followed "severe doubts" that Pullman's future participation in that industry would justify the risks involved and the continued commitment of extensive corporate financial and human resources.

The statement cited these problems: unacceptable contract conditions and sporadic purchasing activities prevalent in the industry; an unstable, competitive environment characterized by the entry of foreign competition; and inability to improve the company's value-added position in the final product without substantial capital investment.

One big question was, what becomes of the passenger car plants at Hammond, Ind., and Chicago, where work on cars for Amtrak and the Massachusetts Bay Transportation Authority will be completed in 1980 (Amtrak) and by mid-1979 (MBTA). "Pullman is currently studying the ultimate disposition of the physical assets employed in the passenger unit, whether by sale or utilization in other Pullman business lines," the statement said. A company spokesman said he could add nothing further. There was some speculation that the plants could be used for construction of freight cars or freight car components.

The statement concluded: "Pullman management expressed confidence in and commitment to the future of Pullman's remaining business activities. The passenger car operations have represented a small part of Pullman's business activities in recent years and a continuing source of losses. With the record backlog in Pullman's freight car and truck trailer business, an outlook for stable growth of the leasing, financing and insurance subsidiaries, and a solid backlog of engineering and construction projects, management is confident of Pullman's future."

Pullman also said it expected to record in the quarter ending March 31 a charge for withdrawal from passenger car build-

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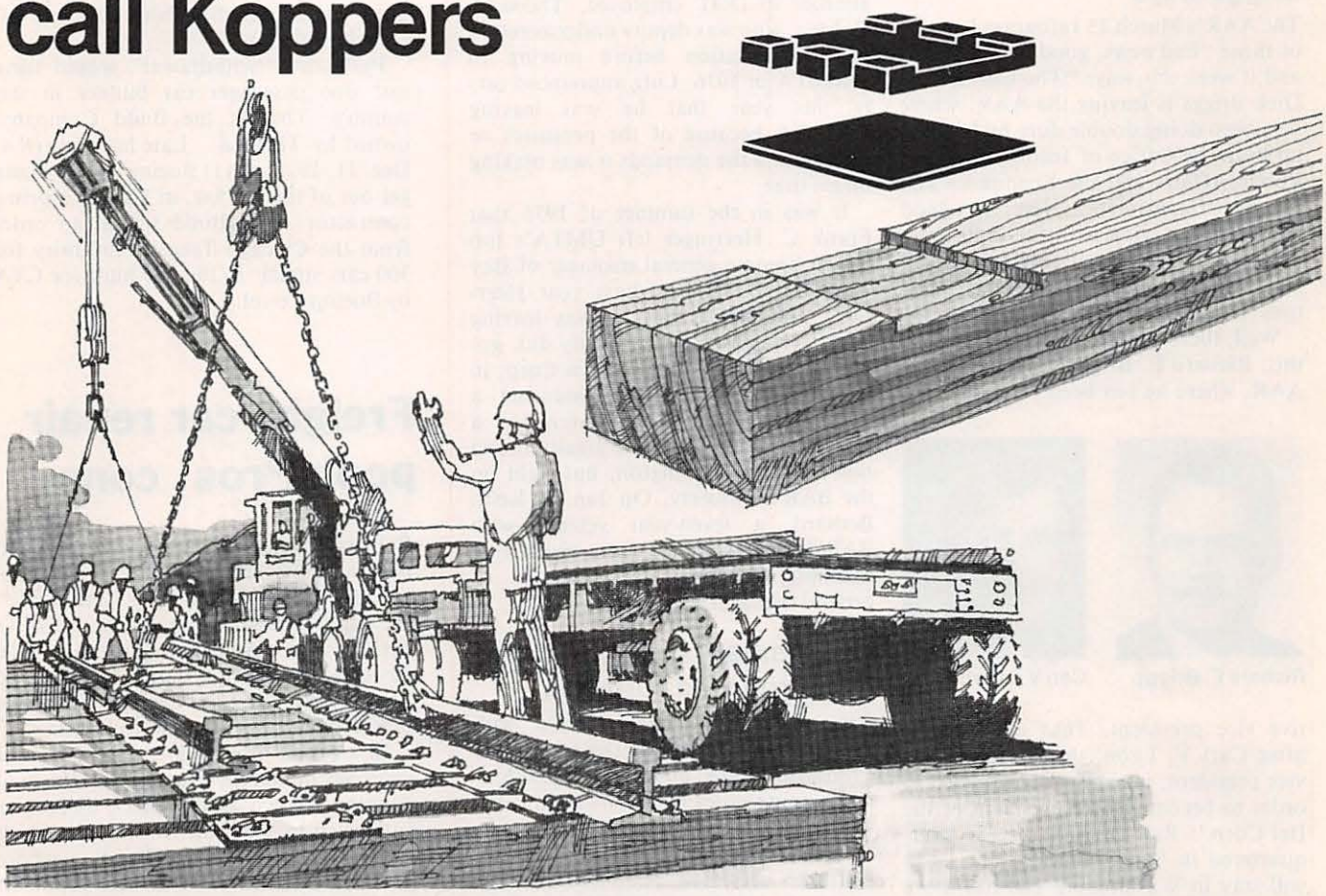

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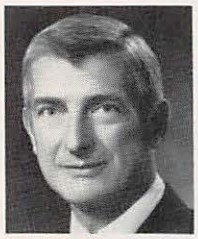
Watching Washington

AAR: Lyon leaves, Briggs stays

The AAR's March 15 Infogram had one of those "bad news, good news" items, and it went this way: "The bad news—Dick Briggs is leaving the AAR, where he's been doing double duty by heading up both the Office of Information and Public Affairs and the Economics and Finance Department. Now the good news: He's staying with the industry—he's off to Jacksonville where he will head up the Seaboard Coast Line Industries' public relations department."

Well, there's more news now, and it's this: Richard E. Briggs is staying at the AAR, where he has been elected executive vice president. That came about after Carl V. Lyon, the AAR's senior vice president, unexpectedly resigned in order to become a vice president of the Itel Corp.'s Rail Division. Itel is headquartered in San Francisco, but Lyon will stay in Washington. Itel has more than $1 billion invested in or committed to railroad freight cars, through arrangements with two or three dozen owned or cooperating short lines, and Lyon's job will be to watch over Itel's expanding railroad interests in the nation's capital.

Richard E. Briggs



Carl V. Lyon

At the AAR, Briggs, as executive vice president, will assume the duties formerly performed by Lyon.

Itel, incidentally, scored another hiring coup recently when it engaged Carl Taylor, Conrail's vice president, rehabilitation planning and mechanical, as president of Itel's Rail Operations Division (see p. 37).

WMATA taps Dick Page to succeed Lutz

For the second time in less than four years, the Urban Mass Transportation Administration is losing its administrator to a transit operating agency. Richard S. Page, who was sworn in as head of UMTA in July 1977 and since then has helped disburse hundreds of millions of dollars to transit systems new and old, has accepted an offer to become general manager of the Washington Metropolitan Area Transit Authority. In that job he will succeed another ex-DOT employee, Theodore C. Lutz, who was deputy undersecretary of transportation before moving to WMATA in 1976. Lutz announced early this year that he was leaving WMATA because of the pressures of the job and the demands it was making on his time.

It was in the summer of 1975 that Frank C. Herringer left UMTA's top job to become general manager of Bay Area Rapid Transit. Last year Herringer announced that he was leaving BART (which he subsequently did, going to work for Transamerica Corp. in San Francisco). BART conducted a five-month, nationwide search for a new general manager and finally found him—not in Washington, but right on the BART property. On Jan. 1, Keith Bernard, a seven-year veteran with BART, was promoted from director of planning, budget, and research to general manager.

Why Amtrak isn't fighting DOT-proposed cutbacks

Amtrak's friends have reacted with dismay and anger to the Department of Transportation's plan to reduce Amtrak's route miles by 43%—a plan that will be carried out if neither the Senate nor the House vetoes it by May 15. But Amtrak's president, Alan S. Boyd, has seemingly sided with DOT's butchers. Why this is so was explained by Boyd with characteristic candor in a talk before the Chartered Institute of Transport in London.

"Some supporters of rail passenger service," Boyd said, "have expressed disappointment, even outrage, that Amtrak has not undertaken a frontal assault on the Department of Transportation in an effort to retain the full 27,000-mile rail system over which Amtrak now operates. My own view is that to do so would be to guarantee, if we were successful, the absolute demise of rail passenger service in our country, because we do not have the equipment or the facilities to provide a viable service at the present time over that full system.

"For the long term, and we are concerned about the long term, the more preferable approach, in my mind, is to reduce the service and the service obligations to the extent to which Amtrak is able to provide modern equipment and facilities to support that service which will enable the traveling public to be provided with a viable choice of transportation modes."

ing—in the range of $35 million to $40 million, net of applicable income taxes. "This charge will include estimates of costs required to phase out operations and complete unfilled orders, costs of closedown of fixed assets, and those costs required to fulfill the company's obligations under benefit plans covering affected employees."

Pullman's "withdrawal" would leave just one passenger car builder in this country. That is the Budd Company, owned by Thyssen. Late last year (*RA*, Dec. 11, 1979, p. 11) Boeing said it would get out of the market, at least as a prime contractor, after Budd snared an order from the Chicago Transit Authority for 300 cars similar to the 200 built for CTA by Boeing Vertol.

Freight car repair pool: Pros, cons

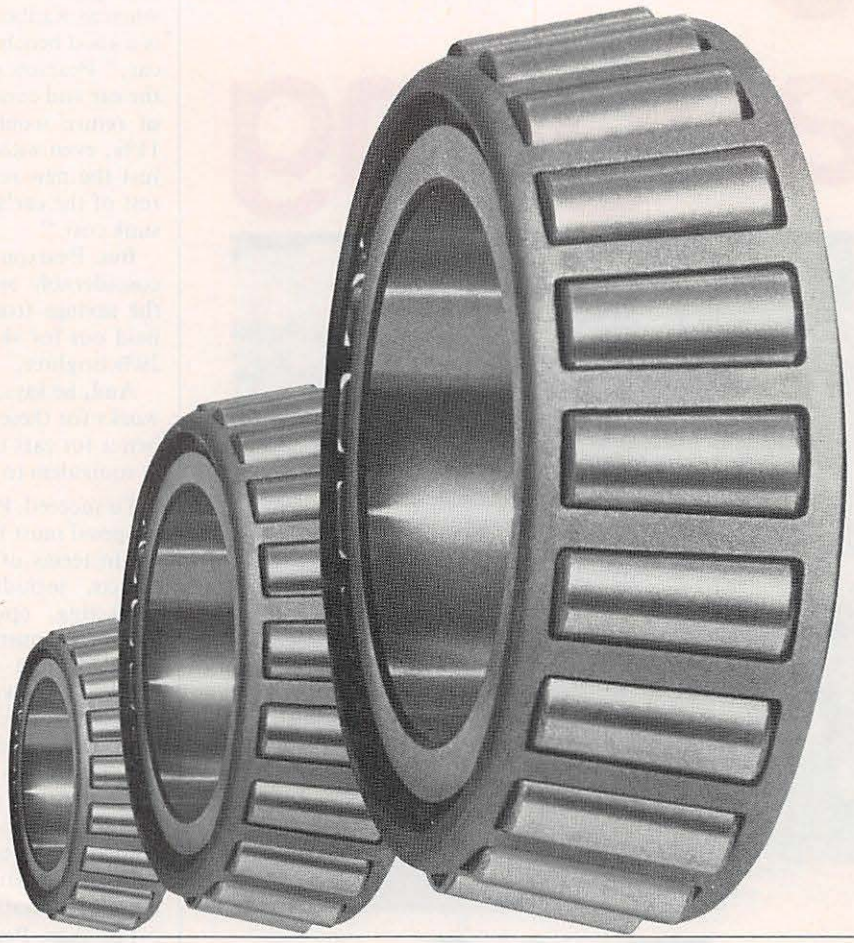
Railroad-owned freight cars repaired and put back into service by a railroad pool car association would help "moderate" the rapid growth in short-line incentive per diem cars. And that's just one of the advantages of such a pool, says Edmond L. Pearson, Illinois Central Gulf vice president and chief mechanical officer.

In a proposal circulated among major railroads in March, Pearson says the pool concept, known as UTILCO, already is supported by Conrail; Detroit, Toledo & Ironton; and Missouri Pacific, whose president, James W. Gessner, proposed such a plan to Congress last year (*RA*, Aug. 28, 1978, p. 14).

Designed to get bad-order cars out of limbo without high costs to railroads, especially those rairoads unable to provide the repairs needed, UTILCO would also help railroads head off some per diem payments to private car owners, Pearson says.

"If the UTILCO-repaired cars were successful in displacing short-line equipment earning incentive per diem, the economics of the UTILCO concept to the Class I railroads would be much more favorable," Pearson says. "We estimate the return on investment would then exceed 40% per year. This would be a very strong reason for undertaking the program, especially if it led to recognition among our regulators that shipper needs were being met and that continued influx of short-line cars was no longer necessary."

Pearson says ICG made a tentative cash flow analysis for UTILCO rehabilitation of a 13-year-old boxcar. ICG assumed rehabilitation life would be only eight years and that a 50-foot, 50-ton boxcar would be used, though a 70-ton car would be more desirable. On ICG, at least, there are more of the 50-ton cars sit-



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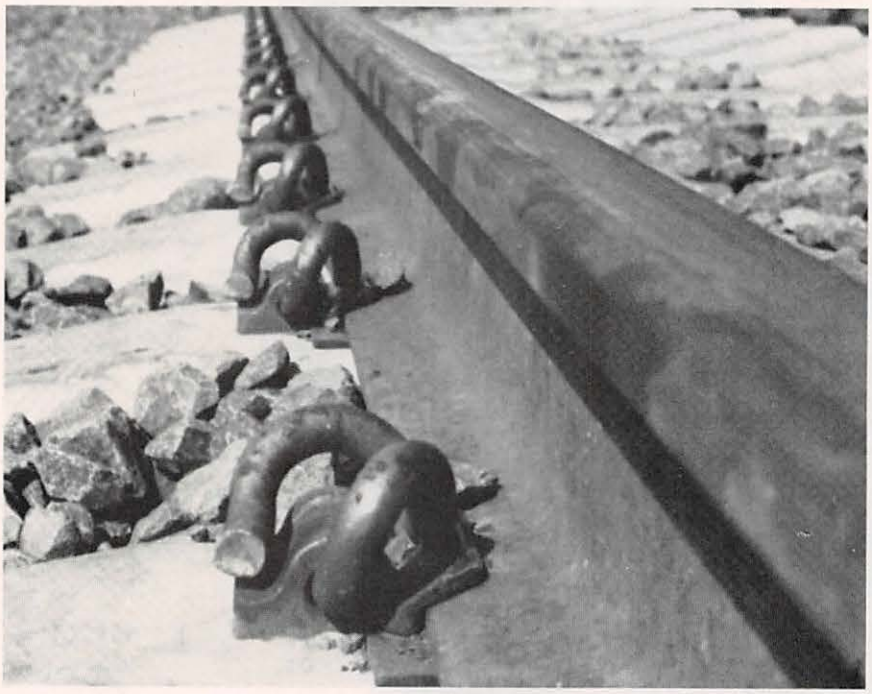

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ting around awaiting repairs.

"Because of the car's age and capacity, we projected the repaired car would achieve only 14 loads per year, even when relieved from car service rules 1 and 2, whereas Railbox told us 17 loads per year is a good benchmark for their 70-ton boxcar," Pearson says. "We found that for the car and conditions just described, rate of return would be only slightly above 11%, even with the investment limited to just the new repair money and with the rest of the car's investment regarded as a sunk cost."

But, Pearson emphasizes, the picture is considerably brighter when you consider the savings from less incentive per diem paid out for short-line cars—as much as 29% brighter.

And, he says, "if the UTILCO concept works for these cars, it should work even better for cars that, if repaired, are closely equivalent to new cars."

To succeed, Pearson says, the UTILCO proposal must be structured so it is feasible in terms of many corporate areas it affects, including financial, legal, tax marketing, operating, and accounting. "Also, it must satisfy the participating railroads and the entity designated as UTILCO, as well as the Interstate Commerce Commission and, with respect to loan guarantees, the Federal Railroad Administration. It cannot be contrary to the interests of the nonparticipating Class I railroads, and specific aspects of the plan are likely to need the endorsement of existing railroad creditors and of railroad labor organizations.

For that, Pearson says, the following questions must be resolved: Which cars are to be repaired and to what extent, and by whose decision? Is federal involvement acceptable? Is Trailer Train the appropriate vehicle? Can a railroad avoid the profit-and-loss impact of UTILCO's repair costs without also transferring title to the cars? Whose reporting will the cars carry? Can this be done with encumbered cars? Will the labor organizations permit railroad-owned cars to be heavy-repaired in shops other than the owning railroad's? Could government funds be used both to pay for repairs and to reduce existing encumbrances?

As for the reporting marks question, Pearson says establishment of a clearinghouse might be the most reasonable answer, so that railroads would gain a significant boost in cars available for loading, along with a saving on empty mileage. In such a clearinghouse, owners' markings would be kept. That would avoid the need for an additional concurrence from the equipment trustee, Pearson says, because equipment trusts conventionally require reporting marks to be only those of the owning railroad or its affiliates.

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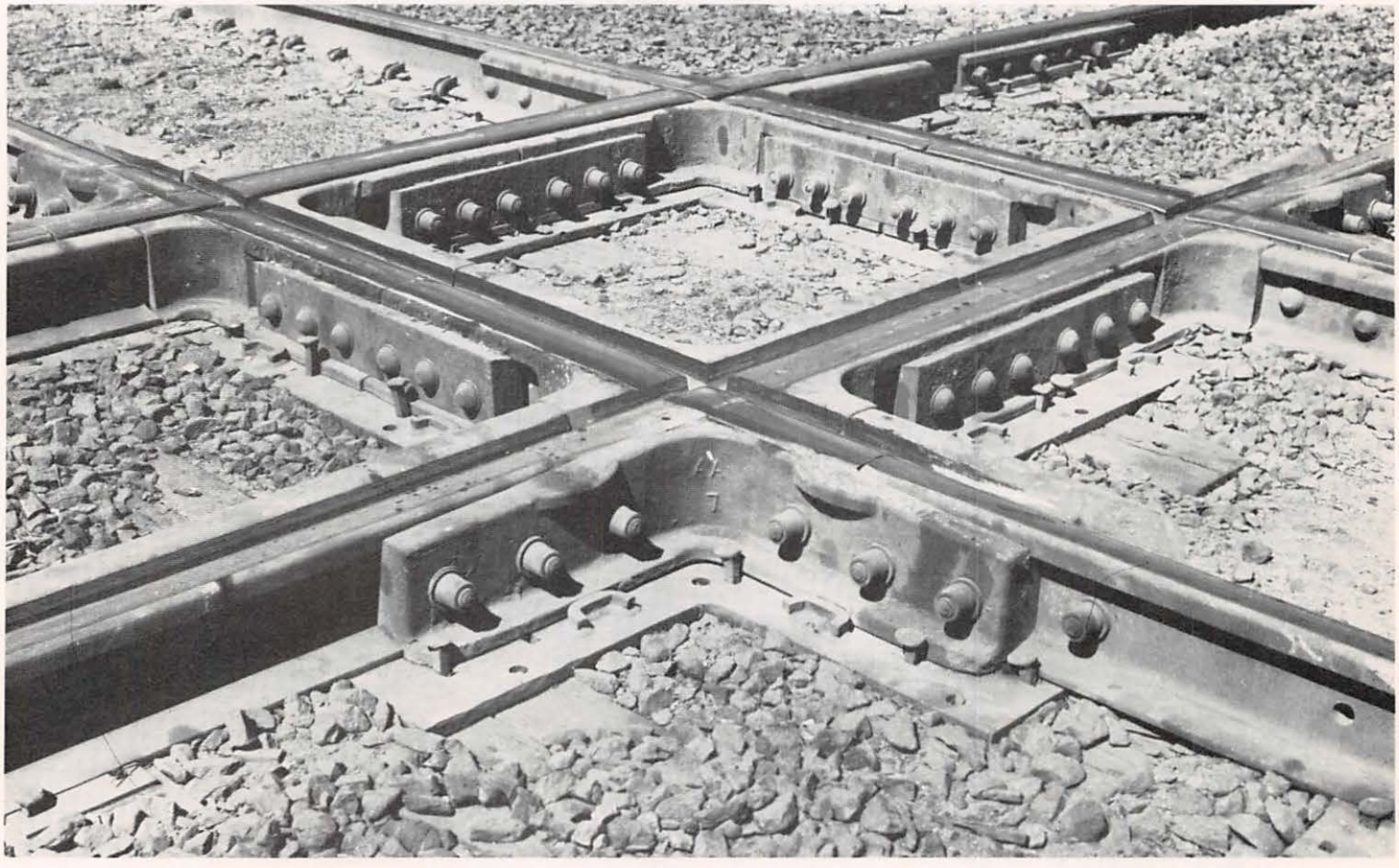

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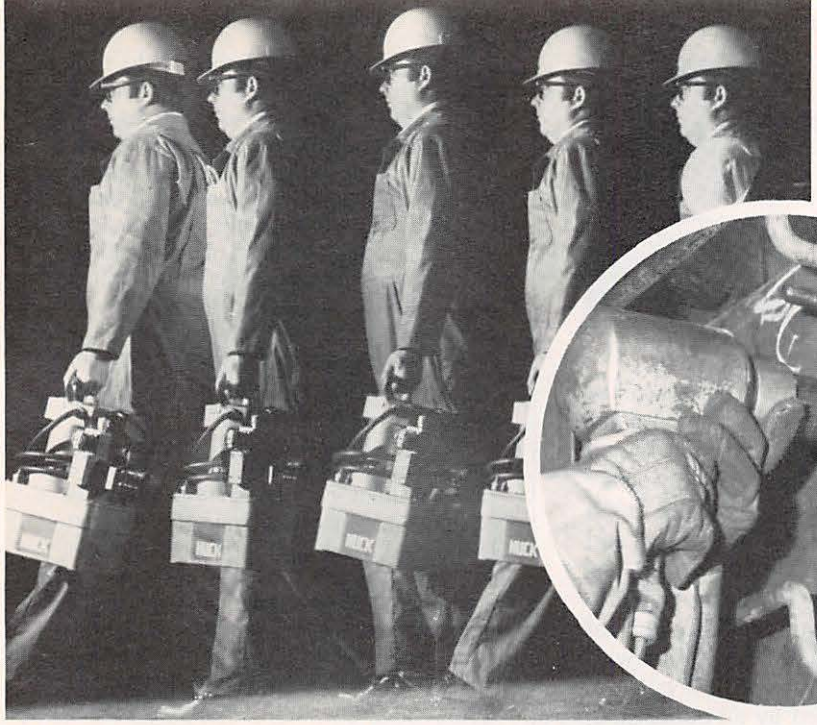
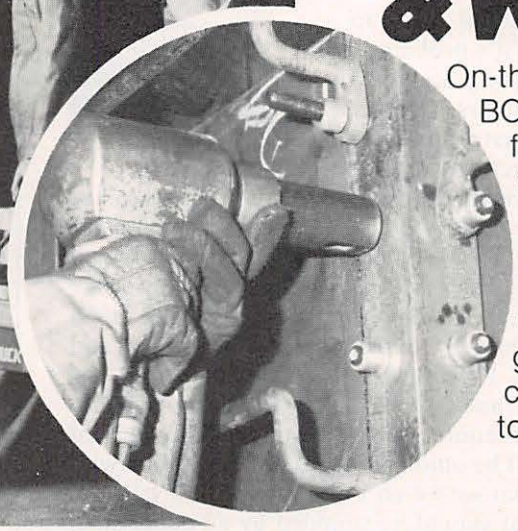


...Norfolk & Western



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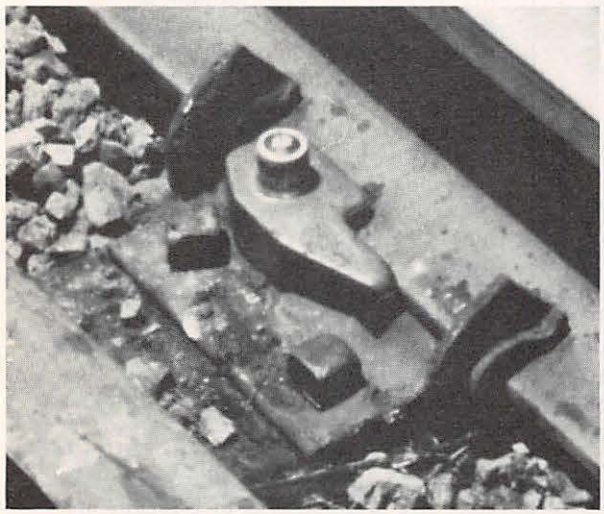

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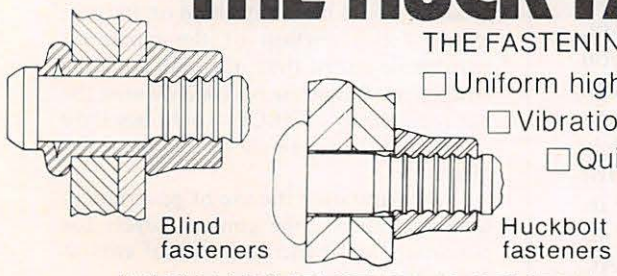

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Lines on Labor

GUS WELTY

WIN OR LOSE

In the kind of labor dispute that leads to a strike, especially a long strike, it's probably accurate to say that most often there are no winners and no losers—only survivors. Oh, occasionally a management will bust a union or a union will bludgeon a management into submission, but those are the exceptions and not the rule. Usually, the survivors are forced into compromise—each side losing something but each side also able to claim its victories. Predictably, that's the way it was in the Brotherhood of Railway and Airline Clerks' 82-day strike against Norfolk & Western, the strike that eventually blossomed into a cross-country walkathon on the part of BRAC. NW President and Chief Executive Officer John P. Fishwick talked again about the strike recently, and despite the rancor of the 82 days, his was a conciliatory voice. The dispute was, of course, settled along the basic lines of an emergency board report: "The union seems to be very happy with the result and . . . I can say that we weren't unhappy with it either." Fishwick sounded the tone that should be sounded by all concerned: NW hopes, he said, that the agreement "results in people coming back together and forgetting about the strike and working together as members of the Norfolk & Western team—which has been pretty effective in the past."

TAKING A STRIKE: FOR WHAT, AND FOR WHOM?

Why did NW take the strike in the first place? Jack Fishwick put it simply: "We took the strike mainly because the union made two demands upon us on which we felt that we could not give in." One of those demands involved scope, and the other had to do with a union veto power over the carrier's ability to take advantage of new technologies. What happened, in the end? Said Fishwick: "We did not give up what we felt we had to have, and that is the ability to manage our railroad. At the same time, the union got what it wanted to some extent, because it got more dues-paying members, some of whom were already covered by the union agreement but just not subject to dues." In terms of numbers, BRAC had demanded that about 1,000 nonunion personnel be put under the contract. The emergency board recommended against giving the organization power to "put a fence" around employees that it hoped to get in the future, and NW held that point. What BRAC got, under the agreement finally reached, was 252 new members/dues-payers (out of the 1,000 demanded), plus payment of dues by 133 people who had been under the contract but exempt from dues payment, plus the transfer of 400 covered and dues-paying employees from appointive to seniority-system status. BRAC did not get veto power over technological change. And, on other issues, it did not get call-back or pay for everybody who had been furloughed, nor did it get job protection for extra-board personnel, nor did it get the right to fine people who had crossed picket lines during the strike.

THAT STRIKE, ANY STRIKE: IS IT REALLY NECESSARY?

It would be easy to say that NW and BRAC should have been able to agree to what they eventually agreed to without 82 days of strife, without third-party intervention. Sure, it would be easy to say—if you were living somewhere other than in the real world, *the* world in which unions keep demanding more and managements fear the consequences of conceding anything of significance, *a* world that is not solely populated by rail unions and rail managements. So, yes, maybe for both BRAC and NW this strike really was necessary. And despite its fearsome costs, maybe it gained something for both. But maybe, as NW kept operating, the real gain was to the rail industry: BRAC didn't shut NW down, did it?

Pearson says. "For example, if the program repairs 10,000 cars that become completely free runners, the average effect on each railroad is an increase of only about one-half percent in available loading capacity. Unless the owning railroad's percentage of time-mileage is substantial and the residual value of the car is high, the success of the program in attracting cars for repair would be extremely doubtful. However, treating the repaired car simply as an ordinary railroad-owned car would limit car utilization by causing extra empty miles to be generated."

The original Gessner proposal called for establishment of an entity to serve as a railroad pool car association using as equipment the existing bad-order cars on U.S. roads. Railroads with such cars but without resources to restore them to serviceable condition would lend them to the pool car association, which would have them repaired and put back into service. "Seed" money would come from low-interest government loans to be repaid as the repaired cars begin earning car hire. Rental rates would be set high enough to recover payback of the loan within two years, cover administrative costs of the association, cover future car maintenance, and possibly allow a small amount to flow back to the car owner as consideration for lending the cars to the pool.

Cars would stay in the pool at least long enough to pay off the repair loan; then the owner could put them back in the home fleet if desired. Underutilized railroad shops and outside contract shops would be used for repairs of only those cars for which cost and extended service life would compare favorably with the economics of buying a new car.

In addition to reduction of the fast growth of short-line incentive per-diem cars, five other benefits of UTILCO are seen by Pearson:

—Cars that don't merit full-scale rebuilding could be returned to service at a cost commensurate with their future earning power in terms of freight revenue that would otherwise be foregone.

—UTILCO cars would be a lower-cost source of capacity than some types of new cars.

—Establishment of a national pool might make possible the waiving of interchange rules 1 and 2 and thereby achieve improved car utilization.

—UTILCO would probably treat repair cost as a leasehold on its balance sheet, and neither UTILCO nor its creditor would have any claim on the car, except for a portion of the repair on reasonable terms; thus, the plan could be structured so that the railroad owning the car repaired by UTILCO would not have to expense the repair on its income statement.

—Incorporating the use of government loan guarantees, the concept offers the potential for financing repair of cars at favorable interest rates.

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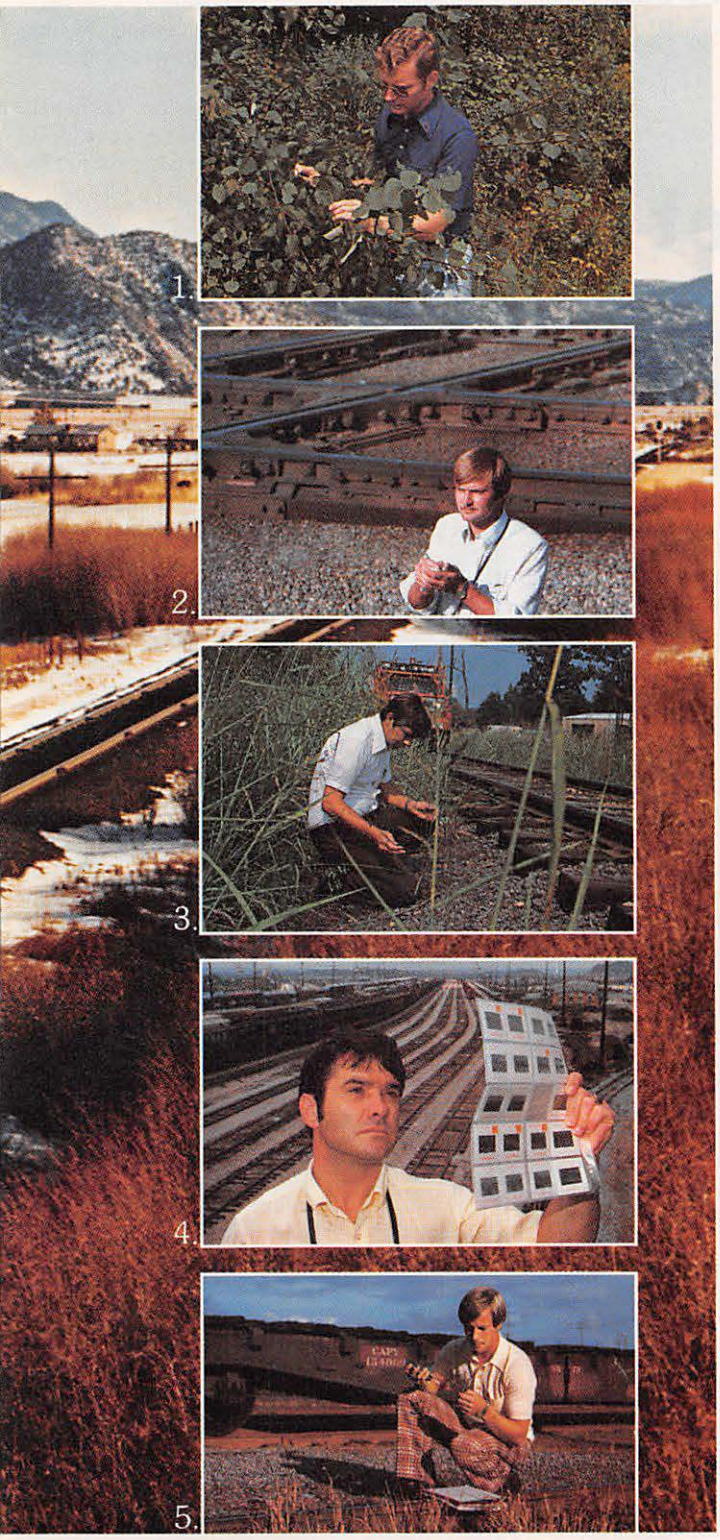

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"Fatal flaws . . ." —AAR's Dempsey

"Room for improvements . . ." —SP's Biaggini

"Blueprint for chaos . . ." —NW's Fishwick

Rails say DOT bill isn't quite the ticket

Two and a half weeks after the AAR unveiled the railroad industry's deregulation proposals (*RA*, March 12, p. 12), the Department of Transportation unwrapped the Carter Administration's own deregulation package (see box). The railroad reaction to the DOT bill was mixed.

"It is obvious," said AAR President William R. Dempsey, "that provisions [in the proposed Railroad Deregulation Act of 1979] such as some of the new restrictions on restructuring, the cutback in rate adjustment powers to cope with inflation, and the sweeping and immediate changes in rate bureau operations would more than offset the positive elements in the bill." Dempsey said he remained hopeful that "a workable bill" could be fashioned, adding: "We intend to work closely with the Congress, the other affected segments of the transportation community, and the Administration to see that the fatal flaws are eliminated."

Benjamin F. Biaggini, chairman and chief executive officer of Southern Pacific, called the Administration bill "a constructive first step toward the removal of unnecessary and counterproductive regulation of the railroad industry and the return of the industry to financial health." Biaggini saw "room for improvements in several provisions of the bill," but he echoed Dempsey's hope that legislation acceptable to the industry could come out of the Senate and House hearings that will begin in mid-April.

Less hopeful was long-time deregulation foe John P. Fishwick, president of the Norfolk & Western, who called the Administration's bill "an unmitigated disaster," "a blueprint for chaos in the railroad industry," and "a classic example of asking the wrong questions and getting the wrong answers." The bill "contains so many flaws that I see no hope of amending it to make a suitable legislative package," said Fishwick. And he said again what he has so often said before: The railroads' real problem is not regulation but subsidized highway competition.

Speaking for the industry as a whole, Dempsey's main criticisms of the bill were these:

"In the pricing area . . . the Administration provides a limited zone of rate-making freedom which—while inadequate—moves in the right direction. At the same time, however, the Administration totally withdraws after two years the authority to effect general rate increases —which have been the only practical way railroads have had for coping with double-digit inflation. It then imposes what may well be crippling restraints on the ability of the railroads to discuss other rates."

[The railroads want to retain antitrust immunity for general rate increases for at least five years. The DOT, in earlier proposals sent to the White House, proposed an immediate end to general rate increases.]

"On cost reductions, the Administration also loses sight of the target. The industry needs more flexibility to merge and restructure plant. Instead of providing new standards to facilitate rail mergers, the Administration proposes that rail mergers now run a traditional antimerger gauntlet. And while the rail abandonment provisions move in the right dirction, the Administration still stops far short of treating the railroads like other businesses when it comes to closing down uneconomic activities. In effect, the proposal takes away, in one fell swoop, certain tested avenues of relief the industry has found essential, while phasing in its new remedies gradually. In some cases, the proposal calls for new sets of untried and complicated regulatory procedures." ■

Key provisions

Rates

The DOT proposal calls for decreasing maximum rate regulation by the Interstate Commerce Commission during a transition period of five years, from Jan. 1, 1980 to Dec. 31, 1984. After that date there would be no maximum rate regulation. Minimum rate regulation would continue as would rules prohibiting rate discrimination.

During the transition period, railroads will have a regulation-free zone within which most pricing decisions can be made with regard only to the transportation marketplace.

Also, under the legislation, the ICC loses its authority to suspend a rate increase or decrease. During the transition, the commission may, however, investigate rates upon complaint by a shipper. It then could order the railroad to change the rates and pay damages if the rates are found to be unlawful.

Railroads will continue to be required to fulfill common carrier obligations when applicable. However, the purchaser of the service must pay the going rate for the service, and prior commitments of equipment, for example under long-term contracts, would take precedence over demands for common carrier obligated service.

Rate increases. During the transition period, individual rates may be raised with no regulatory investigation or interference by 7% each year (in constant 1980 dollars). Industrywide increases will be permitted for two years, but may only cover the economywide rate of inflation.

For larger rate increases, the ICC may investigate the increase only if a user of rail services, such as a shipper, can show it has been hurt competitively by the rate increase. The user also must show it has no reasonable transportation alternative. After investigation, the ICC may order the railroad to reduce its rate, if the railroad cannot show the rate was reasonable. But the rate cannot be reduced below the level necessary to cover the railroad's costs to provide the service and produce an adequate return for the carrier. The rate reduction would apply only to the complaining purchaser. An upper limit is also provided on rates set under this provision.

Rate decreases. To prevent predatory rate making, the DOT proposal stipulates that a railroad may not set a rate below a level which covers the incremental cost of the service, including an adequate return on capital used. After investigation, the

of the Railroad Deregulation Act of 1979

ICC may order the rate increased and may assess damages for violation of this regulation.

Peak and seasonal rates. A railroad may establish specific rates that vary within a set maximum in response to such changes in demand as seasonal peaks. This provision will allow railroads to compete more effectively with unregulated trucks and barges, that regularly offer seasonally or demand sensitive adjusted rates.

Rate investigations and suspensions. The DOT proposal eliminates the ICC's authority to initiate its own investigations and its power to suspend rates. The commission would be empowered to investigate rates only upon request by an injured party.

To discourage a railroad's abuse of the no-suspend provision, a railroad charging a rate later found to be unlawful would be required to refund any excess revenue collected, plus interest, and could be required to pay the complaining purchaser's attorney's fees and costs.

The legislation requires that all rate investigations must be completed and a final decision issued within four months after a complaint is filed. If a decision is not made within that time, the rate is considered lawful.

Rate bureaus. After two years, the department proposes to remove the ICC's authority to grant antitrust immunity to rate bureau agreements that provide for general rate increases or decreases, broad rate changes. Discussion on single line rates would be prohibited immediately.

The DOT proposal also requires that all bureau meetings, except those of a purely administrative nature, be open to the public, a transcript be made available, and all votes be open and recorded.

Notice and publication. Current law requires rail carriers to give 30 days notice of rate changes, while many competing modes are not required to give any notice of rate changes.

The DOT proposal recognizes the desirability of making rates public because complete pricing information improves the functioning of the marketplace and shippers can make certain that carriers are not engaging in illegal discrimination. The notice period will be reduced over a three-year transition period to allow rates to be effective immediately on publication.

Entry

Entry into and exit from the railroad industry have been restricted by the ICC under a "public convenience and necessity" standard. This regulation dates from the early 1900s and was a response to the massive overbuilding of that period. While the regulation served a worthwhile purpose in the past, it now has the effect of restricting the possibilities for increased competition among railroads.

The DOT proposal allows free entry, by either new construction or acquisition, to anyone except a regulated carrier of another transportation mode.

While significant new construction is not anticipated, open entry will encourage increased competition in such areas as ports, where construction of a few miles of line would provide substantial new rail-to-rail competition. The legislation specifically allows construction across a competitor's line, as long as construction and operation can be achieved without undue interference with the crossed line and a fair price is paid for the easement.

The DOT legislation also extends to all metropolitan areas so-called "reciprocal switching agreements" under which a railroad must agree to pick up and deliver cars on behalf of another carrier at a standard switching charge. This will allow a shipper to deal directly with more rail carriers than just those on whose lines the shipper is located, and thus provide greater competition.

Abandonments

Under current regulations, railroads may not abandon a line or discontinue service without first obtaining from the ICC a certificate declaring that the "present or future public convenience and necessity require or permit the abandonment or discontinuance."

DOT's legislation continues this requirement, but defines more precisely the public convenience and necessity standard. If no substantial user or state or local government objects to the abandonment application within 30 days, the ICC must approve abandonment immediately. If there is an objection by a government or by a substantial user, the commission must begin an investigation within 30 days of that objection.

In deciding whether to approve an application, the commission is required to weigh the benefits to the railroad of service discontinuance against the damage to the objecting party and others affected by the service. Except where an application has been approved by the Secretary of Transportation, the railroad has the burden of proof.

However, if the commission finds that the revenues generated by the service do not cover the costs of the service plus an adequate return for the railroad, then abandonment must be approved. If the ICC investigation is not completed within 90 days, the abandonment must be approved.

Once the ICC has approved an abandonment, notice must be published in the *Federal Register*. A potential subsidizer or purchaser has 10 days from the date of publication to make an offer to subsidize or buy the abandoned line.

DOT's legislation provides that if the railroad and the potential subsidizer or purchaser cannot come to terms, either may submit its proposal to the ICC for binding arbitration. The ICC must then act within 60 days. An arbitration decision can be appealed to the United States District Court.

Mergers and consolidations

Mergers. Under present law, the ICC has the authority to approve rail mergers and consolidations, and such an approved transaction is exempt from the antitrust laws. DOT would revise rail merger procedures to require mergers and other large-scale transactions to be reviewed under the antitrust laws that apply to all other industries. The DOT bill would keep intermodal mergers under ICC scrutiny.

In addition, a proposed merger could not occur unless the commission certified it to be in compliance with current labor protection provisions.

Consolidations. The DOT proposal would preserve the ICC's authority over such transactions as coordination of services, exchanges of markets, joint use of trackage, or transfers of substantially less than all rail assets of any rail carrier. The commission must weigh the anticompetitive effects of the transaction on the relevant regional freight transportation market against the transportation benefits arising from the transaction. If the Secretary of Transportation has approved the transaction, his opinion must be given substantial weight by the commission.

The legislation sets a 120-day time limit for action by the ICC unless the consolidation is of regional or national transportation significance, in which case the commission must act within 365 days.

If it can Frankfurt to think what it co Boston and

The ITT centralized traffic control system is the most advanced in the world. Developed by Standard Elektrik Lorenz AG, an ITT company in Germany, it has established a record of safe, cost-efficient operation and improved schedule performance with the German Federal Railways. And it just might be the system to help attain important goals of North American railroads, like those of the Northeast Corridor Improvement Project.

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At the heart of the ITT system is highly advanced, *proven*, computer software. Among its many unique capabilities, two stand out:

One: it automatically sets routes for all trains according to stored schedules, making allowances for train delays and local track conditions,

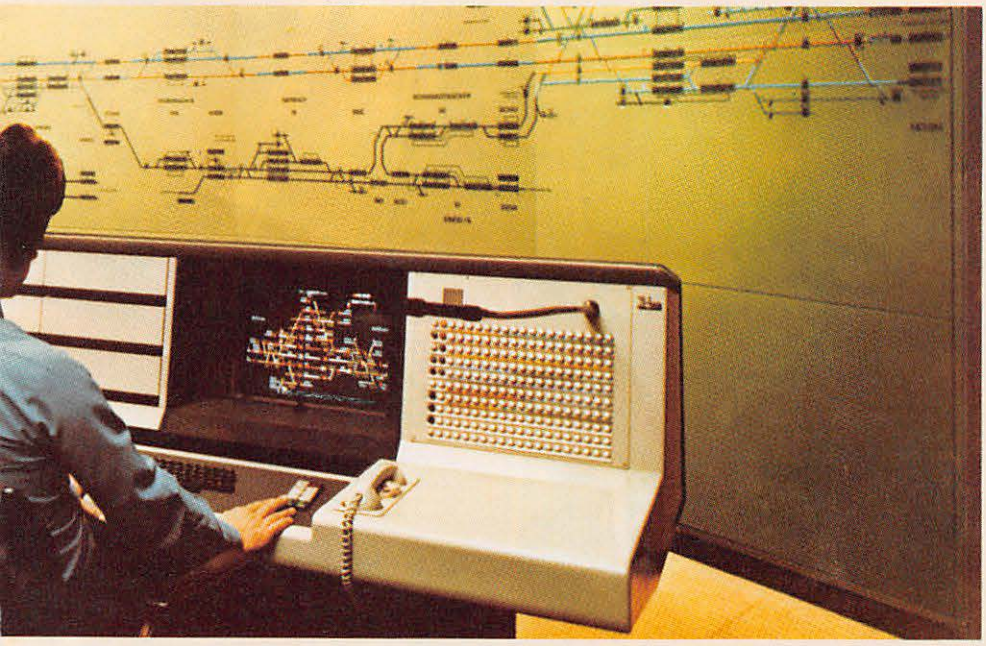
Two: it anticipates all conflicts between trains and provides optimum routing solutions– taking into account relative train priorities, schedule performance, and a host of other operational factors.

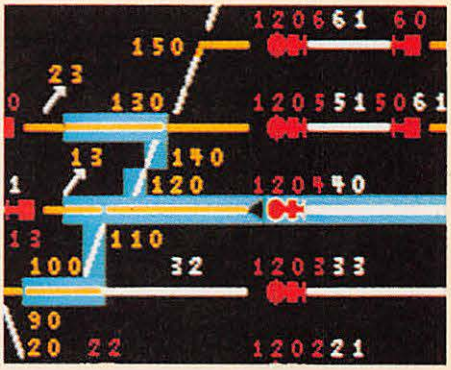
The ITT system's vast capacity for detail relieves the dispatcher of tedious, repetitive work. It also *talks* to the dispatcher, keeping him fully informed of events and enabling him to act in an executive capacity. He can key in on any segment of the entire network. He can check any decision the computer makes. He can intervene at any time. No other CTC system offers as comprehensive a man/machine interface.

The Saarbrücken Story

The Paris to Frankfurt line passes through densely populated, highly industrialized regions. Like the Northeast Rail Corridor, it is very complex: train types, speeds, and priorities vary enormously; shunting can be a dispatcher's nightmare. It is a tough proving ground. Yet it is along this line, from an installation in Saarbrücken, that the ITT system controls some of the most complex rail miles in Western Europe.

help the Paris railway, uld do between Washington.





Dispatchers (left) use the ITT CTC system to control a complex rail network. Routine train following, route setting, conflict resolution are automatic with manual intervention in emergencies. Train numbers and schedule progress appear on the model board; trackside status on high precision color CRT's. A large selection of CRT formats (above) instantly highlights normal and emergency conditions.

Designed, tested and refined during the seven years from 1968 to 1975, the system has been fully operational for the past three years and is doing the job so thoroughly that the German Federal Railways is now installing another facility in Stuttgart.

Small wonder that interest in the ITT system is growing rapidly among rail and transit authorities throughout Europe. Maybe you should be interested, too.

The Boston to Washington Story

Boston to New York in three hours and forty minutes; New York to Washington in two hours and forty minutes. These are two important goals of the Northeast Corridor Improvement Project. Similar important goals are being set by railroads all over North America. If such goals are part of your plans, write to: SEL Canada, ITT Industries of Canada Ltd., P.O. Box 138, Toronto-Dominion Centre, Toronto, Ontario M5K 1H1, Canada.

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For the troubled NECIP, the track gets

"One for the money, two for the show, three to make ready, and four to go. . ."

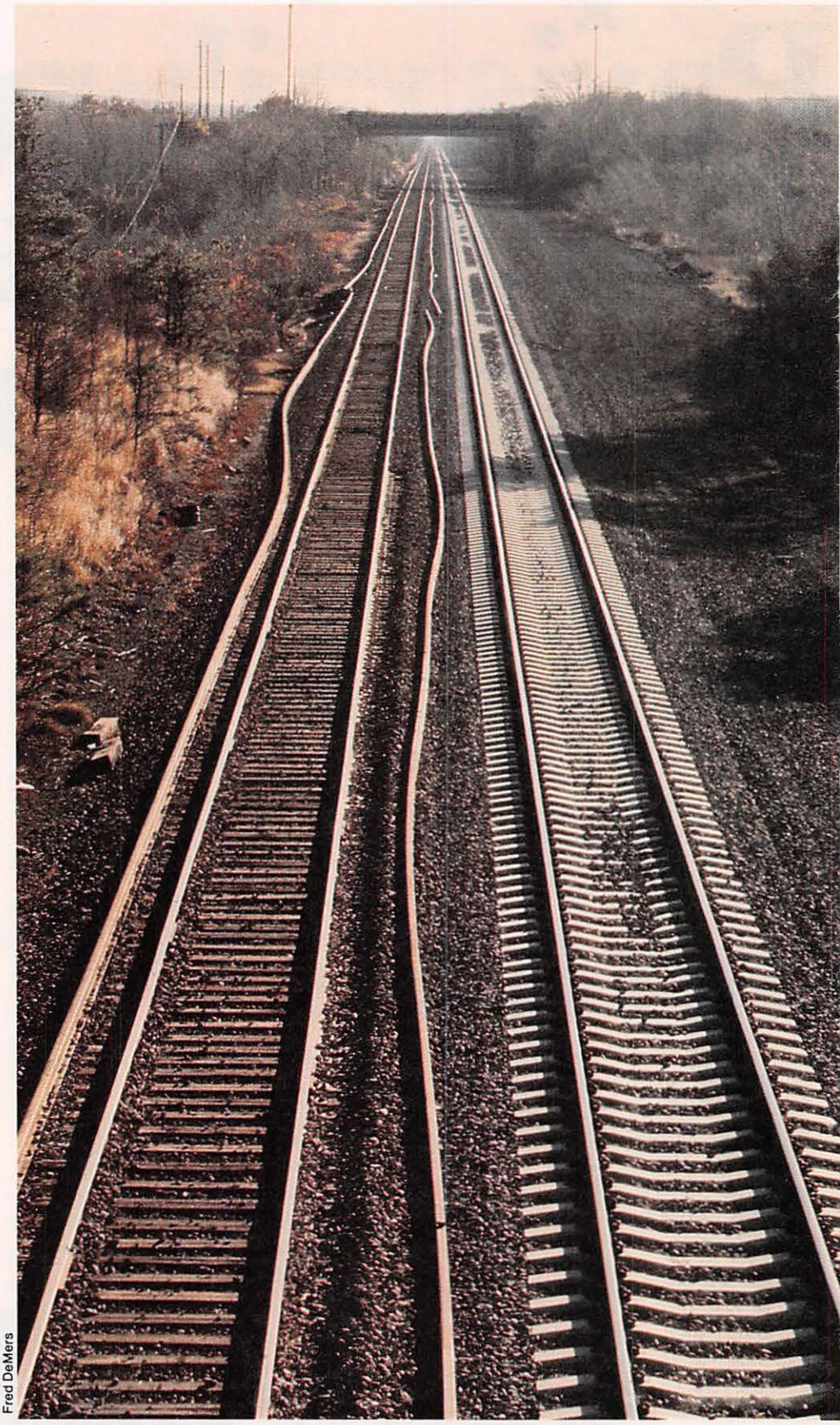
Today—three years after Congress voted to spend nearly $1.75 billion to fix up Amtrak's heaviest traveled lines—the project is behind schedule and is widely viewed as a boondoggle of monumental proportions. In its early days, NECIP was involved in a political tug of war, and as a result responsibility for its implementation was divided three ways—among the U.S. Department of Transportation, Amtrak, and a small army of engineers. The project was run, said Paul Reistrup, then president of Amtrak, by a "three-headed monster" with the result that the organization chart (again in Reistrup's words) resembled "the wiring diagram of a B-29."

But after many months of failure, frustration, and underfunding, the NECIP now appears to be on a steadier course. It is entering 1979's springtime with better detailed plans; a rapidly jelling system design related to a more realistic schedule; a DOT-supported $683-million supplementary funding request (tied to a 1983 completion date) in the hands of Congress; and a management team still enmeshed in a tangled structure, but apparently making progress in working together, anyway. Could this be the year when real forward motion begins to show?

In 1976, the NECIP was folded into the 4R Act, in a rather typical "compromise" between the Administration and congressional desires which compressed the time scale of the original proposal; mandated the achievement of reliable trip times of 2 hours, 40 minutes between Washington and New York and 3 hours, 40 minutes between New York and Boston; and set a funding total of $1.75 billion.

The February 1981 completion date required considerable concurrency in program planning, development, and construction, even though nothing approaching the size and complexity of NECIP had occurred in North American main-line railroading since the Pennsylvania Railroad electrification of almost two generations ago.

The effects of what this January's FRA "Redirection Study" report succinctly categorizes as "overoptimism, underestimation, inflation, and the immense problems of creating and managing a project of this magnitude" soon became apparent. Since program objectives (other than trip times and the date by which they were to be attained) were not closely defined, a common remedy was to cut back on or eliminate items whose omission wouldn't clearly preclude meeting the untouchable



Fred DeMers

NEC in Rhode Island: One track relaid with cwr and concrete ties, one ready for relaying.

smoother

Amtrak's Canron P-811 track-laying machine putting down concrete ties and cwr: Will it consistently lay a mile of track a day?

goals. The program became increasingly limited to a "vastly improved track structure" that would at least allow 120-mph running. Less and less money was available for such amenities as station improvements, curves spiraled for comfort, and maintenance facilities—items that would make it possible for Amtrak to provide attractive, economical service once the huge "construction project" was completed.

Early in 1978 DOT Secretary Brock Adams ordered an evaluation of the existing program, hired a new project director, and called for a realistic plan for NECIP completion. As Federal Railroad Administrator John M. Sullivan explained the "new concept" for the project (*RA*, March 13, 1978, p. 24), not only was a reexamination of project cost and schedule to be made but the program was to emphasize compatibility with Amtrak's equipment program and its future operations, with Conrail's freight traffic, and with the needs of the six commuter authorities that carry 28,000,000 passengers a year on NE Corridor trackage.

Recognition of the need for living together was nothing new, of course—the 4R Act provides for a train operation coordinating body with arbitration powers if necessary—but a deliberate re-look at the situation was certainly called for at this point.

● **Redirection effects—now and later.** The resulting 140-page Redirection Study report sets forth the nature, needs, prospects, and interactions of the three classes of corridor traffic (Amtrak intercity, commuter, freight) in detail, looks at the types of equipment that will be available in the early '80s, and then recaps the process used by the FRA-led team to settle upon and cost out a program that should meet the intercity specifications while enhancing, rather than frustrating, commuter and freight services.

Immediate effects of the "redirection" will be primarily indirect—the recommendations (which require congressional actions to become effective) don't change Fiscal Year 1979 or 1980 spending totals. Nevertheless, the sense of direction generated in looking so closely and agonizingly at the myriad trade-offs over the life of the project (with due consideration for effects on Amtrak's costs and service extending far beyond NECIP completion) could refine the way much of this year's program is carried out.

"The thing I'm most proud of on the project so far is the *quality* of the detailed planning that's been done since 1977," says Louis N. Thompson, FRA's project director since late last May. "It's really going to pay off. We've learned, for example, how much it saves to do everything you're going to do to a section of track while you have it out of service. Now that we have a pretty clear idea of what we're going to be able to do in upgrading track and roadway quality and alignment at every point (assuming Congress buys the redirection), we should be able to do just that."

● **The 1979 track structure plan.** There's never been any question that track upgrading is the most essential aspect of the project, and 62% of all expenditures through FY '78 went into this line item. Track rebuilding will be the most conspicuous part of the 1979 program as well. Recently released planning figures put the $138.5 million in terms of the principal quantitative results expected, so they can be compared directly with the '77 and '78 work-season actuals.

Will 1979 be the season when the "production line" reaches expectations and the personnel training, experience, and organization of last year shows up in long stretches of Class 6 roadway? The learning curve slope between '77 and '78—at least on the basis of the cost/efficiency formula used—was steep enough to suggest that it's at least possible. Will the Track Laying System consistently put down a mile of concrete ties a day? Wood-tie installations have already peaked, so a good deal of the credibility of the redirection budget hangs on the answer to that question. If day-by-day preplanning the TLS's 120-mile course through the New England summer can do it, the 1979 program may make it.

● **A peak of disruption.** One prediction is reliable: From the standpoint of traffic delays, 1979 will be the worst. The trackwork program is at its peak, but little fully reconstructed track suitable for recovering lost time will be in service until late in the season. Planners have subdivided the main line into 11 geographic segments, known as Railroad Development Projects, with RDP boundaries located at principal interlockings so trains can be diverted around work in progress

NECIP: *Accomplishments and plans*

Work item	Unit of measure	Actual 1977	Actual 1978*	Planned 1979
CWR Installation	Track miles	71.4	66.5	75
CWR joint elimination	Welds	3426	2324	2340
Insulated joint renewal	Joints	342	189	240
Wood tie renewal	Ties	215,886	231,056	200,000
Concrete tie installation (Track Laying System)	Track miles	—	41.4	121 (75 mi. new cwr)
Surfacing	Track miles	54.1	104.5	150
Shoulder ballast cleaning	Track miles	104.4	23.1	175
Undercutting	Track miles	39.1	53.6	40
Ditching	Track miles	—	33.3	154
Cost efficiency:** (Percent of budgeted work accomplished ÷ percent of budget expended)		45.8%	72.8%	

*Work through Dec. 31, 1978; 1977 and 1978 "work seasons" extend through March 31 of next year. Years from 1979 on to be reported on calendar year basis.
**From NECIP Redirection Report, January 1979.

as efficiently as possible. On April 1, Amtrak suspended operation of two Metroliner round trips, relatively less-patronized mid-day schedules which are most subject to delays at the peak of the workday, and it is further adjusting its April 29 timetable "to try to retain some degree of credibility."

As noted in the TLS schedule, the Secmafer ballast undercutter (a contract operation) will again be working *behind* Amtrak's Canron P-811 track-laying machine in the track-renewal process. Last year's experience, which included occasional shattering encounters with ancient granite surveyors' markers lurking beneath the ties on today's track alignments, developed this strategy for allowing the TLM to keep going.

Replacement of turnouts in interlockings will accelerate later in the season as a Geismar system for the rapid, mechanized installation of prepaneled units goes into full service. Except for frogs, which are secured by glued joints in the interest of replaceability, all joints through mainline turnouts, including switchpoint heel connections, are being welded. Fifty interlockings will have some degree of reconfiguration in the rebuilding process to improve operations and maintenance.

The redirection plan reinstates major realignments at four interlockings—Dock (Newark), Fair (Trenton), North Philadelphia, and Zoo (Philadelphia)—and two sets of curves. In total this will save 3 minutes and 43 seconds northbound (and 3 seconds more southbound, some indication of the precision involved in designing for 120-mph railroading). "We'd like to do more realignments," says Amtrak Vice President and Chief Engineer Robert F. Lawson, "but on an electrified railroad, when you're figuring what it costs you have to remember to look up at the catenary as well as down at the track."

● **Other 1979 highlights.** Examination of the phasing of funding for major components of the corridor program as recommended by the redirection study confirms that most major system design decisions have been reached, with the characteristics of the railroad as it will be in the early 1980s largely determined by the '79 work. Dollar figures for this year include contract obligations for hardware and work to be delivered in later periods. Some highlights as discussed by Lou Thompson follow:

—*Electrification.* The New London-Boston line will be electrified at 25 kV, 60 Hz with catenary of constant-tension Electrack (British) design. While this system has an established history of successful operation at corridor speeds, the fact that further experience with it will be available from the test loop installation at Pueblo is definitely comforting in contemplating the scheduled second-quarter 1982 start-up in New England.

The existing electrification of the Washington-New Rochelle line will be switched over to 25 kV, 60 Hz in 1981 and 1982, with refurbishing and retensioning of the existing catenary. The Southeast Pennsylvania Transportation Authority (former Reading and PRR) lines connecting with but not operating over the corridor main line will remain at 11 kV, 25 Hz; this will greatly reduce the number of SEPTA cars that must be converted. Nevertheless, a major part of the $55 million in the FY '79 Electrification item will go to start the SEPTA and NJDOT conversion program for those cars which will continue to run over corridor trackage. Much of the rest will go for long-lead purchases such as transformers for the new electrifications.

Pandrol threadless fasteners lock cwr in place on concrete ties with rubber tie pads.

The corridor segment from New Rochelle (where it joins the line from Grand Central Station) to New Haven will remain at 11 kV, 25 Hz. All Amtrak corridor motive power is or will be compatible with the old system, and the conversion of 244 Metropolitan (New York State) and Connecticut Transit Authority cars running on this line is avoided, along with the clearance modifications that would be required for the higher voltage. On the former PRR lines this is resulting in track lowering or bridge replacement at 100 locations.

—*Signaling.* The big bulge in FY '79 for signaling ($149 million) is to cover contracts, expected to be let in May or June, to design and furnish signaling for three corridor segments:

1. From New Haven to Boston an entirely new signaling system, compatible with the new electrification and including ctc, will be installed.

2. From Washington to Wilmington the existing signaling system must be made compatible with the new voltage and frequency. Ctc will be added; most intermediate wayside signals will be eliminated in accordance with the availability of cab signaling and atc; and most interlockings will receive all-new equipment.

3. From Wilmington to New Rochelle the existing system will be rebuilt or replaced for compatibility with the new voltage and frequency; from Wilmington to New York existing four-indication signals will be replaced by a new seven-indication system. Its 80-mph and 60-mph indications will suitably enhance track capacity in this most densely trafficked territory. There is no reason to anticipate technical problems with the new system (which generates the additional cab signal atc controls by the presence or absence of a 260-Hz signal in the intervals between the track code pulses of the existing 100-Hz system), but the schedule allows time for its prototype to be proven in at Pueblo so that any unpleasant surprises will occur in Colorado rather than under traffic in the East.

Systemwide betterments include reverse

NECIP: *DOT's program for completion in 1983*

($ millions)

PROGRAM ELEMENT	1977 & PRIOR	1978	SUB-TOTAL	1979	1980	1981	1982	1983	TOTAL
A. FUNDING LIMIT-NONMATCHING									
ROUTE REALIGNMENTS	3.3	2.4	5.7	16.0	32.5	30.4	0.0	0.0	84.6
TRACK STRUCTURES	154.5	183.1	337.6	138.5	98.3	79.7	67.9	0.0	722.0
BRIDGES	21.9	20.7	42.6	60.5	51.3	43.0	42.2	0.0	239.6
ELECTRIFICATION	2.1	19.7	21.8	55.2	64.3	106.0	102.6	0.0	349.9
SIGNALING	1.1	9.4	10.5	149.2	30.1	35.9	34.0	0.0	259.7
COMMUNICATIONS	0.3	3.4	3.7	18.2	5.9	5.8	0.0	0.0	33.6
GRADE CROSSINGS	1.0	12.0	13.0	0.0	3.0	0.0	0.0	0.0	16.0
STATIONS	2.5	7.1	9.6	7.8	26.7	18.7	15.1	0.0	77.9
SERVICE FACILITIES	4.3	2.8	7.1	23.9	32.5	41.0	55.4	0.0	159.9
TUNNELS	0.0	3.4	3.4	8.3	18.0	0.0	0.0	0.0	29.7
DCP PM/SE	26.8	46.5	73.3	35.8	34.3	34.2	28.0	18.5	224.1
FRA PM/SE	6.0	10.6	16.6	7.2	9.5	8.6	7.9	7.2	57.0
SUBTOTAL	**223.8**	**321.1**	**544.9**	**520.6**	**406.4**	**403.3**	**353.1**	**25.7**	**2254.0**
B. FUNDING LIMIT $150 MILLION MATCHING									
FENCING AND BARRIERS									
FED.-100% SAFETY RELATED	0.3	1.2	1.5	24.8	10.1	7.4	0.0	0.0	43.8
FED.-SHARED	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0	2.8
STATE/LOCAL-SHARED	(0.0)	(0.0)	(0.0)	(0.0)	(2.8)	(0.0	(0.0)	(0.0)	(2.8)
STATIONS-NONOPERATIONAL									
FED.-100% SAFETY-RELATED	0.7	2.0	2.7	1.4	14.3	10.1	0.0	0.0	28.5
FED.-SHARED	0.0	0.2	0.2	0.0	13.3	26.7	20.2	0.0	60.4**
STATE/LOCAL-SHARED	(0.0)	(0.0)	(0.0)	(0.0)	(13.3)	(14.4)	(20.2)	(0.0)	(47.9)***
DCP PM/SE	0.2	0.5	0.7	6.6	2.1	1.5	0.0	0.0	10.9
FRA PM/SE	0.0	0.0	0.0	1.6	1.0	1.0	0.0	0.0	3.6
STATE-SHARED PM/SE	(0.0)	(0.0)	(0.0)	(0.0)	(0.8)	(0.8)	(0.7)	(0.0)	(2.3)
SUBTOTAL (FED. ONLY)	**1.2**	**3.9**	**5.1**	**34.4**	**43.6**	**46.7**	**20.2**	**0.0**	**150.0**
C. **TOTAL (FED. ONLY)***	**225.0**	**325.0**	**550.0**	**555.0**	**450.0**	**450.0**	**373.3**	**25.7**	**2404.0**
D. OTHER NON-NECIP FUNDS									
PUBLIC GRADE CROSSINGS	0.0	0.0	0.0	35.0	31.0	0.0	0.0	0.0	66.0
INDEMNIFICATION		100.0	100.0	NOTE: THROUGH PL85-804, $100M WILL BE MADE AVAILABLE FOR USE ON PROGRAM IN FY 79 AND SUBSEQUENT YEARS					
UNION STATION	0.0	0.0	0.0	0.0	20.0	10.0	0.0	0.0	30.0
TOTAL	**0.0**	**100.0**	**100.0**	**35.0**	**51.0**	**10.0**	**0.0**	**0.0**	**96.0**

*The pre-1980 fund estimates are based on actual or intended obligations; the post-1979 fund estimates are based on intended appropriation requests.

**This figure reflects current estimates of availability of local matching funds. If more or less local matching funds actually materialize, these figures will be adjusted accordingly. No increase in authorization will be required unless the subtotal (federal only) exceeds $150.0 million.

***This figure does not match the $60.4 million federal share because the local matching share for Washington Union Station is being covered by $12.5 million of $30.0 million federal funds cited in Section D of this table. This assumes enactment of appropriate authorization and appropriation legislation during FY 79.

signaling on all "designated" (high speed) tracks where not now provided. All "outside" (freight and local) tracks south of New York will also have reverse signaling, and additional aspects in approach to Washington Union Station and Penn Station (New York) will save as much as 1.3 minutes for trains making straight movements into platform tracks.

—*Bridges.* Deteriorated or inadequate bridges are a major plague on the corridor; 249 will require attention, with 29 being replaced and the rest rehabilitated. All with a rating less than E-55 will be upgraded. The $60 million in the FY '79 program, added to the $42 million previously applied to the problem, will begin to result in visible improvement this year.

Other big-ticket 1979 items include $25 million for intertrack (station) and right-of-way (primarily anti-vandal overpass) fencing, $24 million for service facilities (including site and building work on nine maintenance-of-way bases) and $30 million (the first PL 65-804, non-NECIP money) for the elimination of grade crossings. Except on a low-speed, hopelessly curved section near the New London station, there will be no grade crossings on the corridor.

● **The trains didn't come with the set.** As a specified aspect of the redirection study, the relationship between Amtrak's equipment program and NECIP schedules was reexamined. A hypothetical 1981-85 Amtrak timetable, based on current traffic with the addition of trains to provide half-hourly Washington-New York and hourly New York-Boston service, was used to generate requirements for 120-mph equipment. These in turn were compared with Metroliner upgrade and AEM-7 locomotive/Amfleet car acquisition schedules. One conclusion is that, from operating and capital-cost considerations only, stopping the Metroliner upgrade program at its current 34-car level and providing locomotive-hauled trains to furnish service equivalent to that which could be run with all 61 Metroliners if refurbished is a somewhat more economical alternative.

● **Will they run on time?** FRA's report concludes that the system resulting from the recommended program will provide a tight but adequate cushion (9 minutes between New York and Washington, for example) on the mandated trip times—enough for "95% within 5 minutes" reliability with the upgraded signal, power distribution, communication, and rolling stock subsystems in place at the completion of the program. ■

Alaska Railroad: Boom, sag, and the

By TOM KIZZIA

The next couple of years are going to be crucial ones in the history of the Alaska Railroad. Seldom have so many pressures been brought to bear from the public and private sectors on the only railroad owned and operated by the federal government.

While the state of Alaska is looking at ways to build a transcontinental rail link to the "lower 48," the federal comptroller general, in a critical audit released by the General Accounting Office last year, recommended that Congress look again at the idea of selling the railroad.

At the same time, the railroad is trying to pull itself back from several years of operating losses. The ARR is proud that it never has to go back to Congress for an operating subsidy, but in the period of slow economic recovery that has followed completion of the Trans Alaska Pipeline, that tradition may come to an end, if only to maintain passenger service.

The ARR management, though, is turning the corner, and 1980 will decide the railroad's future course. The railroad is in good physical shape at last; traffic is picking up; and in February officials met in the ARR offices to consider new marketing strategies and a financial management plan that should satisfy even their GAO critics.

• Railroading the government way. It is not always easy for railroaders like ARR General Manager William Dorcy to remember that on this line they are federal bureaucrats, too. But that is what Dorcy has to do now that he has completed his first job—rebuilding the plant and bringing the railroad back to earth from its highballing pipeline years.

A major topic of discussion in Anchorage has been last year's GAO audit. Several young and energetic investigators from Washington were sent north in 1976 to sift through records, talk to administrators, and explore the strange world of railroad rates, and they returned to write a report critical of some of the ARR's management practices.

"There were never any complaints about the way we were running the railroad itself," points out Dorcy, and the 73-page report backs that up. Shippers were getting their freight through; that was never a question. The GAO's critique had more to do with how the ARR was performing the functions of a government agency, following rules and regulations.

And though the ARR management concedes that some of the GAO's criticisms were on target and helpful to their efforts to update the Anchorage office, they have found it is not always easy for the government to act on its own recommendations. Among the problems still facing the federal railroad:

—A key criticism in the GAO audit was that leases for ARR-owned land were far below market value. But when the railroad tried to respond by jacking up rates accordingly, angry leaseholders got U.S. Senator Ted Stevens (R.-Alaska) to push a bill through Congress calling for a Department of Transportation study and limiting increases to 100% in the meantime.

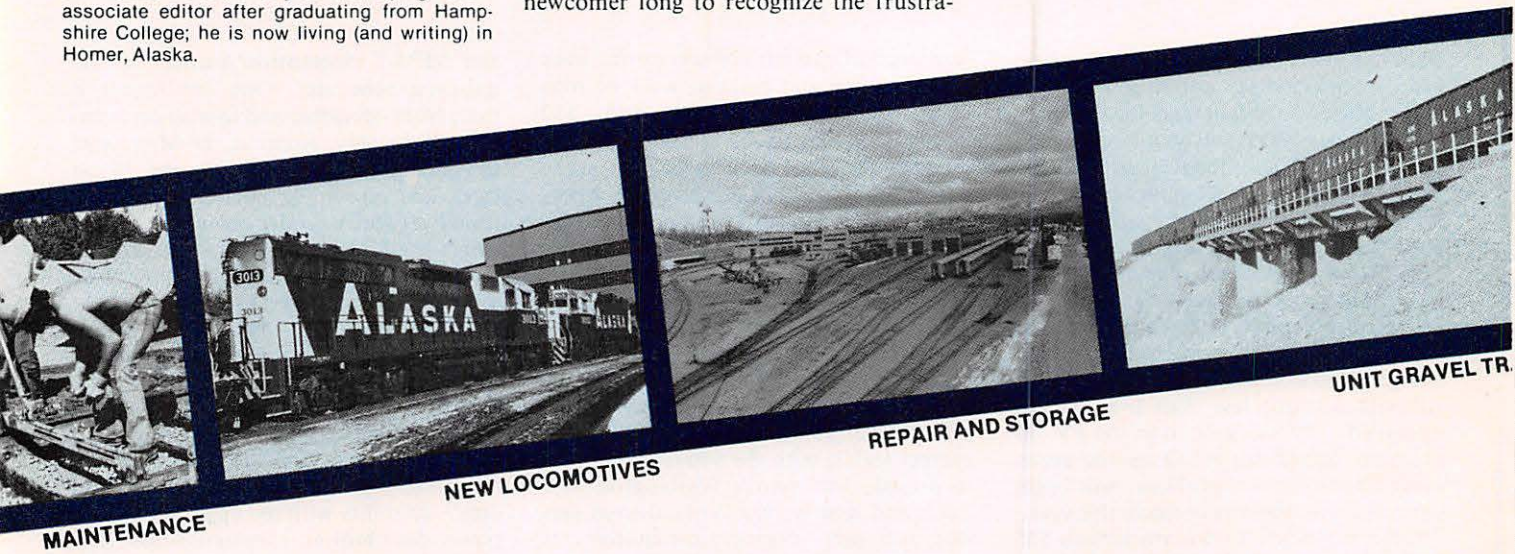
—The GAO also said the ARR had failed to make any serious marketing efforts. But, says Dorcy, "It doesn't take a newcomer long to recognize the frustration these people face operating a government-owned railroad in a small, highly competitive market. A competitor has no qualms about turning to his Congressman or the DOT and applying political pressure. They say Uncle Sam is subsidizing the railroad to undercut them."

—Like most railroads, the ARR has depended on sizable landholdings to provide income and promote traffic. But because technically that land is federal land, it may be subject to being claimed by Native corporations under the Alaska Native Claims Settlement Act, passed by Congress in 1971. A test case involving 2,700 acres of prime real estate north of Anchorage is now before the Interior Department, and in all more than 70% of the railroad's 38,000 acres have been claimed by Native corporations.

—For 1978, ARR revenues would have exceeded operating expenses by $1.3 million but for a $1.5-million loss in its passenger operation. Operating on the same for-profit principle to save the taxpayers money, Canada's government-owned CN Rail has been able to get federal subsidy of its passenger service (*RA*, Apr. 10, 1978 p. 32), but the ARR has been forced to continue to support the passengers with its freight service.

Another problem for the ARR management—and one that should win them the sympathy of businessmen and bureaucrats alike—is the amount of paperwork forced on the railroad by other agencies of the government. While those agencies are reimbursed for their end of the paperwork come budget time, the ARR has to support its paper-pushing effort with the money it makes from its operations.

Tom Kizzia worked briefly for *Railway Age* as an associate editor after graduating from Hampshire College; he is now living (and writing) in Homer, Alaska.



road to recovery

● **1980—the crucial year.** General Manager Dorcy says 1980 will be the decisive year for the Alaska Railroad. At that point the ARR will have to be back to break-even. The nearly $9-million profits made by the railroad during the pipeline construction years will have been used up. The ARR had operating losses of $2.3 million in fiscal 1977 and $5.9 million in fiscal 1978, though taking into account nonoperating revenues and depreciation expenses on noncash items, cash flow was a positive $1.4 million in 1977 and a negative $1.8 million in 1978. So far this year it's been just a little better; a $2.3-million operating loss through the worst part of the year should improve considerably with the projected summer tonnage and rental increases. To keep pace with declining traffic, the labor force has been cut down drastically, from a peak of 1,171 to 600 today (with some difficulty, due to Civil Service as well as union rules).

The decline in traffic was inevitable in the post-pipeline economic sag, which has put several trucking firms completely out of business. "It's been a period of tremendous adjustment," says Dorcy. "Inside the railbelt there was just too much transportation." Along with the downturn in construction activity was the completion in 1978 of an oil refinery in Fairbanks, using North Slope crude, which cut profitable long-haul shipments of oil by 30%. The state attorney general's office is now investigating another factor in the decline for possible violations of state antitrust laws: The powerful Alaska Teamsters Union, subject of a Pulitzer Prize-winning newspaper investigation several years ago, has sweetheart contracts with major shippers like Sea-Land requiring that 50% of all freight to Fairbanks travel by truck, which is about twice as expensive as by rail under the railroad's TOFC/COFC "plan one" tariff.

● **Break-even strategy.** ARR's management is working out a strategy of even-handed recovery, not pinning their hopes on another boom. Financial and political problems have stalled construction of the 4,800-mile natural gas pipeline from Prudhoe Bay to the Midwest, the biggest civil enginering project in history, so it's too early to begin carving into that pie-in-the-sky. "Governor [Jay] Hammond is very committed to diversification of the economy through use of the state's Permanent Fund (funded by oil revenues) so that we're not constantly waiting for gas pipelines," says Jackie Lindauer, a technical writing specialist with the ARR.

Eyeing developments like the state's expanding bottomfish industry, the ARR has instituted the first ever through rates for fish from Alaska to the Orient. In the past two years, unit gravel train operations have been developed and expanded, and there are other possibilities on the horizon. But again, there can be a problem operating a federal railroad: The ARR sometimes finds itself limited by its lack of capital, unable to borrow in order to take prompt advantage of new traffic or joint venture opportunities.

Rate deregulation will not help the ARR directly, but it could provide a big indirect boost to revenues as the railroad enters its year of decision. New rates could affect the 40% of the ARR business that is interline traffic, bringing in new revenue on a prorated basis.

"Things are starting to turn around already," Dorcy said in March. "This month looks considerably better than it did a year ago.

"When we get to the point where we have to break even again," Dorcy says, "the difficult decision about passenger service will have to be faced. So far we've been able to pay for it out of freight revenues." Last year the ARR requested a federal subsidy for the passenger losses and was turned down. The only subsidy it receives is a break-even contribution from the state of Alaska to pay for additional trains to roadless Whittier in summer months. "How much would it cost to build a road into Whittier?" he asks. A lot.

● **Physically fit.** The railroad itself appears to be in excellent physical health. In the past three years the ARR has invested more than $37 million on capital improvements, with much of that money coming in federal aid. The railroad has replaced ties, surfaced track, restored shoulder embankments, relaid curve-worn rail, rebuilt battered rail joints, placed thousands of yards of aggregate, and engaged in a major bridge repair and upgrading program. It has also completed four new tunnel portal structures on the line into Whittier. This summer the ARR will spend $6.3 million in federal money to repair old earthquake damage to docks at Whittier and Seward, and for next year another $5 million has been budgeted, for right-of-way work.

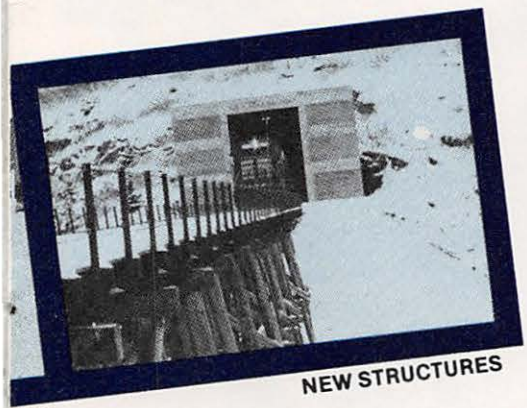
Late in fiscal 1978, the ARR received delivery of four new GP40-2 3,000-hp locomotives, bringing the number of new 3,000-hp units acquired since 1975 to 15. ARR officials say the motive power fleet is now at the highest standards in the history of the railroad, and except for a few open-top hoppers, the railroad's rolling needs are as set as the rest of the physical plant.

That more than anything is the legacy of the pipeline years—and of the tenure of General Manager Dorcy, who came north on loan from the Katy three years ago.

"Right now we're in excellent shape for a light-density single-track railroad," he says. The railroad's confidence was bolstered in March when new safety figures showed the ARR as the third best Class C railroad in the U.S., with only 7.48 injuries per 200,000 man-hours. That compares to 8.85 in 1977 and a relatively poor showing of 21.45 in 1976. "We're ready for traffic," Dorcy says. "And we're out looking for it."

● **Real estate problems.** However, the ARR's problems as a government agency are somewhat distracting at the moment, particularly those involving real estate. The railroad's purpose since 1914 has been to aid in the development and settlement of Alaska's public land, and in some cases the development function of leasing overcame the revenue-generating function. "Actually, some of the leases were just glorified permits," Dorcy admits. In the days when everyone was just hanging on, this didn't seem to matter. But when the pipeline came through, property values skyrocketed and ARR leases didn't.

Now a newly organized group of leaseholders, which has been described as a "Who's Who of Alaska Business," has fought off ARR attempts to keep up with the times. "They figure the railroad is



NEW STRUCTURES

...INS

In the past three years, more than $37 million in capital improvements and acquisition of 15 new 3,000-hp locomotives have put the ARR in excellent physical health. Today's problems are mainly those of marketing, real estate, and management according to government rules and regulations.

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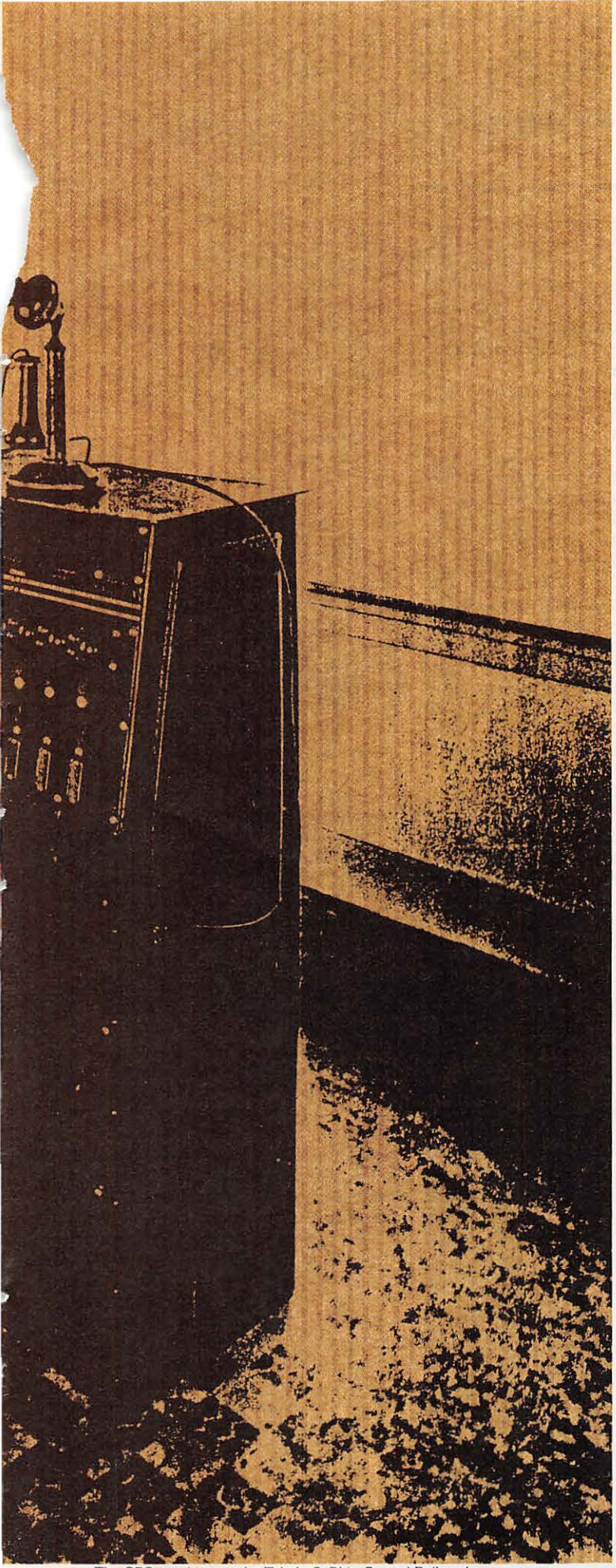

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Sell or abandon the ARR? When Alaskans are pushing so hard for its extension to the lower 48?

here to help them," says a frustrated Dorcy.

As if that weren't a thorny enough problem, the ARR is also forced to do battle with the new Native corporations, which were given the right to choose more than 40 million acres of federal lands in Alaska. Some land, like military installations and national parks, was excluded. All other federal land was made available, except "the smallest practicable part. . .enclosing land actually used in connection with the administration of any federal installation."

Most of the 2,700 acres now being claimed by the village of Eklutna contain gravel used by the railroad, which would cost an estimated $200,000 a year if it had to be purchased.

"We are not unmindful of the importance of the Alaska Railroad to the state's economy or the realities of railroad operations," said the Federal-State Land Use Planning Commission when it recommended the natives be given 2,458 of the 2,700 acres. "However, we believe it must be assumed that Congress considered these matters. . . ."

The question is now being hashed out by Secretary of Transportation Brock Adams and Secretary of the Interior Cecil Andrus. If nothing can be settled there, Congress may be asked once again to consider these matters.

● **The "lower 48" connection?** Meanwhile the state of Alaska is continuing to push for extension of the railroad south from Fairbanks through British Columbia to link up with the lower 48. An $865,000 engineering study to determine a route to the border, funded by the state two years ago, is in the final stages of preparation and due out this summer. "All the indications are that they have a good route for a railroad," says Ron Walt, a transportation planner for the state Department of Commerce and Economic Development.

The 297-mile line to the border would cost an estimated $1.2 million per mile.

There are currently two resolutions before the Alaska legislature urging the governor and Congress to move ahead, and a similar resolution of support recently passed the Washington State senate. Unfortunately for proponents of the line, the current government of British Columbia has cooled over the idea, and extension of the British Columbia Railroad to the Alaska border is a key part of the project.

"We're really talking about a truly transcontinental railroad, a new route to the Orient," says Walt. "Eventually construction would involve the midwestern states as well as the governments of the U.S., Canada, and Alaska."

● **Sell or abandon? Unlikely.** With such enthusiasm for government-financed expansion it doesn't seem likely that the Alaska Railroad will be put up for sale. And abandon it? Dorcy says if the state ever did an "economic impact statement" for such an act that would quell all such talk immediately. As an example of what he means, he points out that the state has budgeted more than $220 million this year for highway and aviation projects—more than all the money ($217 million) the federal government has put into the ARR in 65 years.

The GAO report recommended that Congress take up the question of whether the federal government should continue to own and operate the ARR. Perhaps a private railroad could do better for local consumers, it suggested.

But those familiar with the risks of running the railroad in Alaska doubt that a buyer could be found who would maintain service. The Nixon Administration proposed the sale, but the Carter Administration has so far been cool to the idea. "We are operating on the assumption that the railroad will remain a government entity," Dorcy says.

If the government holds onto the railroad, the GAO said, "Congress needs to ensure that FRA continue to exercise proper leadership and control over ARR to avoid recurrence of the management problems we found."

● **GAO's critique.** Marketing was one of the weak points hit in the GAO audit. The ARR was not an effective competitor, the GAO concluded. Dorcy shakes his head. "The problem was, with the pipeline who needed a marketing plan? Suddenly they had all the business they could handle." But the ARR knew it needed to boost its marketing effort as activity slackened, and in fact some incentive rates were already being instituted when the GAO made its report.

Other GAO findings dealt with inadequate financing and accounting procedures, and ARR is working with the FRA to develop a new accounting and management information system.

Responding to the criticisms, FRA Administrator John M. Sullivan wrote: "While we agree that ARR has not effectively managed *some* of its affairs, the report addresses itself primarily to the areas of marketing, real estate, internal control, financial management, and ARR's future role, concentrating on management of support areas versus operating areas which, if examined, would speak well of ARR management. In terms of expenditures, the GAO report concentrates on only 15% of ARR's activities."

Dorcy concedes that the ARR management didn't always live up to the letter of the law in its effort to keep up with the demands of shippers while the pipeline was being laid across Alaska. But he is clearly proud that the railroad managed, in spite of the federal manpower ceiling, six unions, and Civil Service requirements, to increase its workforce by 50% in order to handle a sudden boom in traffic, and then cut back down to size. "Not all the rules were followed during the boom," he says.

The federal bureaucrat bows his head contritely, and when the railroader looks up, there is a twinkle in his eye. ■

ARR: *The 5-year record*

Fiscal years 1974-1978 ($ thousands)

	1978	1977	1976 TQ	1976 30 Jun	1975	1974
Operating revenues	$27,440	$33,376	$ 9,737	$52,517	$41,416	$20,783
Operating expenses	33,412	35,727	11,129	49,406	36,208	22,389
Income from operations	(5,972)	(2,351)	(1,392)	3,111	5,208	(1,606)
Nonoperating properties						
Income	1,651	1,646	314	1,161	871	703
Expense	213	255	35	191	272	158
Nonoperating gain (loss)	1,438	1,391	279	970	599	545
Net gain or (loss)	(4,534)	(960)	(1,113)	$ 4,081	$ 5,807	$ (1,061)
Less extraordinary item:						
Deferred outlays (Note 7)	543	809	917	1,038	—	—
Adjusted net gain (loss)	(5,077)	(1,769)	(2,030)	$ 3,043	$ 5,807	$ (1,061)
Ratio of operating expense to operating revenue	121.76%	107.04%	114.30%	94.08%	87.43%	107.73%

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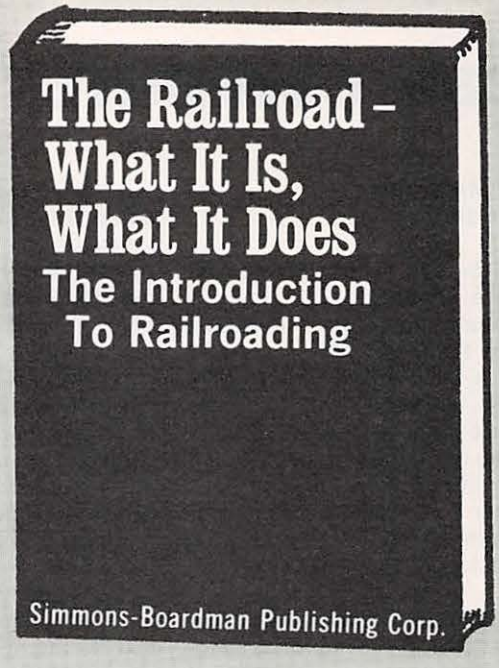

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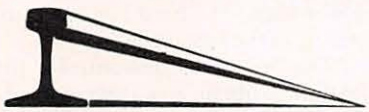

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In-cab computer is on the way

By FRANK MALONE
Associate Editor

What could be one of the greatest juggling acts in the history of railroad research is under way at the Association of American Railroads' technical center in Chicago. It will continue through 1979 and into 1980, and when it ends, railroads could well see the long overdue addition of a computer to the locomotive cab.

With the avowed goal of putting a minicomputer on board for improvement in train handling, AAR Track/Train Dynamics (T/TD) planners are trying to:

—Wipe out the bad tastes left from previous attempts at moving cybernetics closer to the engineer's seat, namely rail management's fear of the high costs of previously proposed systems and mechanical officers' fear of more maintenance problems.

—Convince locomotive engineers that their jobs are going to be improved, not removed, by the computer.

—Prove to suppliers that getting involved in development of on-board data processing would be commercially worthwhile.

—Prove that the cab-computer link can be made without revolutionary changes in current computer technology.

This project is part of the T/TD program's phase III task called train operations aids, which seeks to improve existing system safety and efficiency without significant hardware changes, while taking advantage of rapidly developing computer technology (*RA*, Sept. 25, 1978, p. 48).

AAR's technicians believe they have found just the type of durable minicomputer they need for the evaluation projects, and they expect to take delivery of it—"off the shelf"—soon, probably this month. Equally important is the development of effective means for evaluating the small computer and related components of a full-on-board system. That is also under way, with a new full-scale locomotive cab, designed by technical center staff, under construction. Known officially as a locomotive cab instrumentation and controls evaluation stand, it will be in operation this summer, next to the center's airbrake laboratory.

● **The heart of the matter.** Most significantly, the new evaluation stand will be able to simulate activities—especially in power load and airbrakes—of two locomotive units at the same time. With that capability, AAR researchers are going straight to the heart of the matter, the locomotive engineeer's instrumental isolation from locomotives other than the lead unit.

Keith Hawthorne, newly named director of T/TD after directing completion of phase II, explains the need for on-board processing:

"At present, with the exception of the alphanumeric displays on the consoles of radio-controlled, remote locomotive consist monitors, the locomotive engineer has virtually no feedback on the factors influencing train performance, beyond those specifically located on the controlling locomotive.

"It is, therefore, desirable to display more information to the locomotive engineer so that he can better assess the existing situation. Thus, it is necessary to have an instrumentation system which will acquire data and display information, in real time, to assist the engineer in monitoring and controlling the locomotives and the train."

Hawthorne is talking about needs that AAR researchers have taken great pains to identify through interviews with locomotive engineers and road foremen. In late March, Will Ambrose, consultant and manager of the train operations aids task, and Steve Kiger, industrial engineer working on human factors of the task, completed interviews of nearly 60 employees of five major railroads: Southern, Santa Fe, Union Pacific, Southern Pacific, and Chicago & North Western.

Ambrose points out that computer applications in the airline and trucking industries have been so well publicized that locomotive engineers are keenly aware of them. "This isn't going to be the shock that the locomotive simulator was," he says. "Its time has come."

● **How computers can help.** Ambrose, a former Santa Fe locomotive engineer and instructor, says the interviews showed complete agreement on the need for computer assistance in the cab, especially among crewmen who had undergone training with locomotive simulators. A former Conrail locomotive engineer, Kiger says 10 computer-aided needs were identified, three of them unanimously: (1) How are trailing locomotive units performing in power loading and in braking? (2) What is the location and cause of alarm bell, and how can problems indicated in trailing units be diagnosed from lead unit? (3) How is the rest of the consist speeding up or slowing down; especially how is it decelerating?

Employees interviewed also identified the need for one processor with "the feature of selectivity," that is, a single instrument from which various types of locomotive and train information could be obtained. Other identified needs included track profile information, brake pipe pressure and gradient data, drawbar force at rear of train, disposition of loads and empties in a train, and better grouping of cab instruments in general.

● **Reassurance for engineers.** The surveys included some reassurances that T/TD planners frequently emphasize.

"We don't want to give the operating crews the impression that we're taking their jobs away," Kiger says. "We're trying to bring in information already there, so that crews can use it in a less nebulous manner. We're trying to take some of the 'seat-of-the-pants' art and quantify it. We're not going to make dramatic changes."

Ambrose puts it this way: "We're trying to combine the knowledge in train operation, simulation, and existing computer technology to provide the locomotive engineer with more information about train operating conditions, and to build computer-based intelligence into the locomotive. We're looking for systems that will aid the engineer in interpreting the factors influencing the performance of a train.

"The engineer has virtually no information on what goes on beyond his controlling unit. Now we're trying to get that information up front."

● **Facing up to skepticism.** Though the needs are clear, there are many skeptics, and the train-operations aid planners know what they're facing. That's why they insist that the equipment they're looking at is nothing exotic in the context of current computer technology. "I think people will be skeptical until they see a demonstration that the use of such processing can be beneficial," Hawthorne says. He points out that some railroads who tried it before were stifled by technological difficulties, and that led to doubt about the need for on-board processing in the first place.

"Our job is to demonstrate that it's feasible to obtain and analyze this data on board," Hawthorne says. "The scope of the program is narrow; reliability is the real issue. We have every belief that it is feasible." For the supplier, Hawthorne emphasizes that proving feasibility means just that: "We're not in the business of designing and patenting commercial systems."

Kiger adds: "We've got to demonstrate the benefits of a system like this and more clearly identify them in terms of dollars and cents." One big benefit is accident

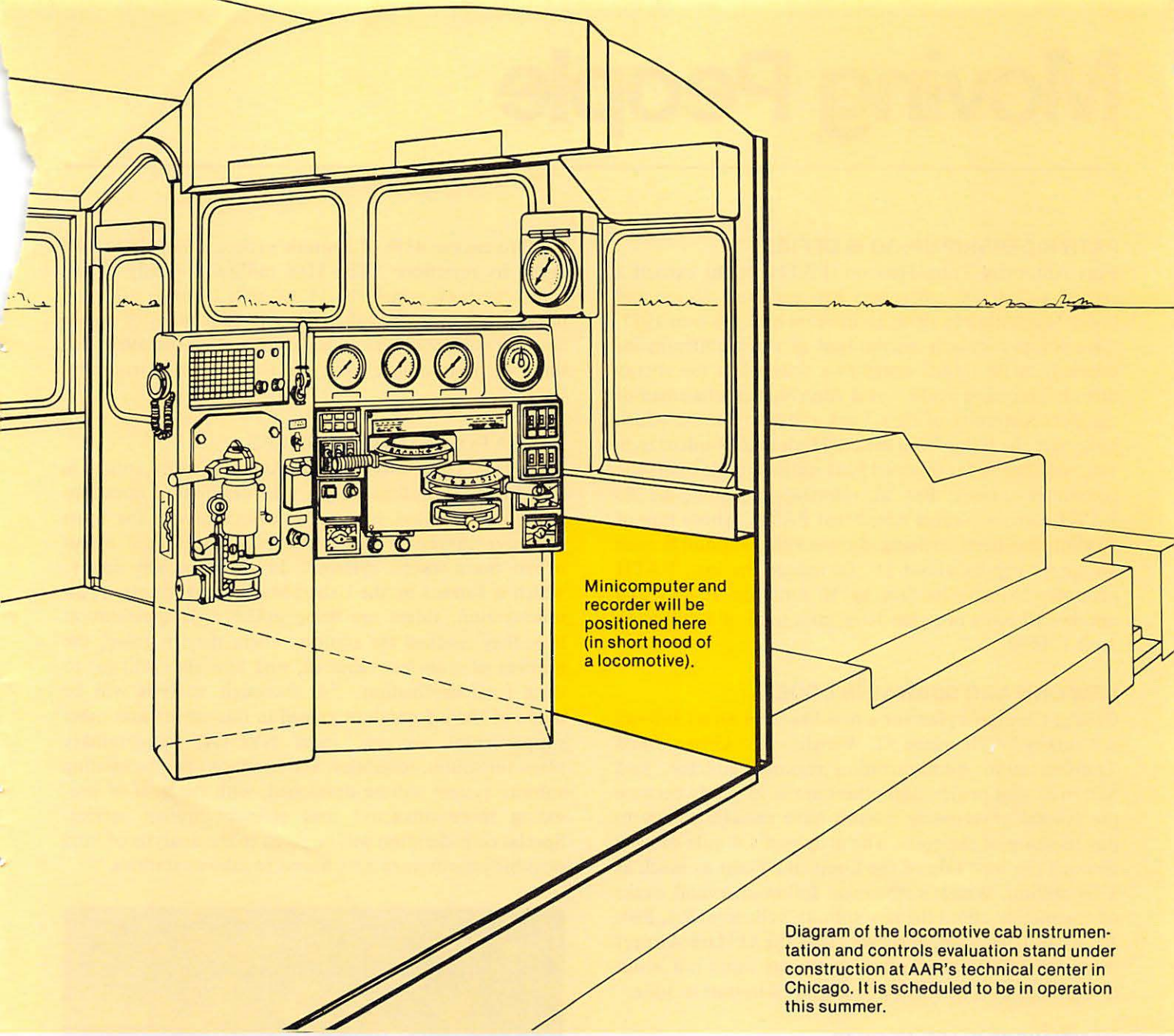

Diagram of the locomotive cab instrumentation and controls evaluation stand under construction at AAR's technical center in Chicago. It is scheduled to be in operation this summer.

prevention, but Kiger immediately raises the obvious problem: no adequate way to measure the savings from derailments prevented. He says everybody's job will be made easier, especially in maintenance. On-board processing, Kiger contends, will result in less maintenance and in an improvement of whatever maintenance is needed.

● **A broader system.** The minicomputer Ambrose expects to start evaluating soon will be part of a broader on-board data acquisition system known technically as the Advanced Locomotive Cab Instrumentation System. It will consist of sensors, signal conditioners, multiplexers and de-multiplexers, transmitters, receivers, controls, displays, and recorders, all aimed at the computer.

Hawthorne was waiting to make a final selection of the minicomputer until proposals were in (deadline April 15) for another important element of the overall instrumentation system, the power supply for the entire setup. He's looking for a power system flexible enough to be used in general laboratory work as well as in the field.

For all components of the system, the most important quality sought is sturdiness; all elements must be able to withstand the harsh locomotive environment. That's why a military-type minicomputer, like those used in tanks, was being considered.

The minicomputer will be 20 inches long, 12 inches wide, and 20 inches high, and will come with a recorder about half that size; the whole thing would fit into the short hood of the locomotive in front of the engineer. It will be delivered 30-45 days after being ordered. A prototype power supply is scheduled for delivery in December.

Meanwhile, an important element of the instrumentation is still being designed: the locomotive sensors. Ambrose says original designs were for something too expensive and specifications are being rewritten. A request for proposals for sensors is expected to be ready this summer.

Ready April 1 were requests for proposals for two other elements, the telemetry system (transmitters and receivers) that will "talk" to the computer and the rear-car transducer system (sensors).

The type of terminal (output display, input keyboard) to be used in the cab is so far unresolved; evaluations will probably be made with a "selective" type of display. ■

Moving People

PATH RIDERSHIP UP; SO IS DEFICIT

Port Authority Trans-Hudson (PATH) trains carried a record 41,750,000 passengers between New Jersey and lower Manhattan in 1978, an increase of 3.2% over 1977. "We are particularly encouraged at this significant increase in mass transit usage at a time when the energy crisis is becoming acute," said Alan Sagner, chairman of the Port Authority of New York and New Jersey, which took over the trains from the old Hudson & Manhattan in 1962 and has so far invested $267 million in the interstate commuter system. But as ridership increases, so do PATH's losses. Sagner noted that PATH, whose fare of 30 cents has been unchanged since 1961, subsidizes each passenger trip by about $1. To reduce the loss, PATH proposes to raise its fare by 10 cents on June 1 and another 10 cents one year later, to a total of 50 cents on June 1, 1980.

NEW CHICAGO SUBWAY IN DOUBT

Calling Chicago's plan for a new Franklin Street subway a "turkey," Theodore G. Weigle, Jr., Urban Mass Transportation Administration regional director, said March 22 that project and others are in jeopardy because the federal government doesn't have enough money to pay its share of the costs. The proposed 4.6-mile subway through the west side of the Loop could cost as much as $700 million. Weigle's statement followed several weeks of speculation about the new subway's chances (*RA*, Feb. 12, p. 38.). He said, however, that the O'Hare Airport extension of Chicago Transit Authority rapid rail is not threatened; its construction is scheduled to start in June.

"ANTI-WEST BIAS" AT DOT?

Adriana Gianturco, California's state transportation director, detects a strong "anti-West bias" in DOT's proposals for restructuring Amtrak. She put it this way in testimony before the U.S. Senate Subcommittee on Surface Transportation: "We favor a high level of rail service in the Northeast Corridor, we support improvements to that corridor, and we look positively on the marketing efforts used by Amtrak in the corridor. We think what's good for the Northeast is equally good for the West. We have in the coastal zone of California alone one-half the population of the Northeast Corridor. Trains currently running within California or with a terminal point in California generated 953 million passenger miles in 1977, only 108 million passenger miles less than trains in the Northeast Corridor. And yet we are scheduled, if the U.S. DOT recommendations go through, to get no track or facility improvements (compared to a recommended $2.5-billion worth of such upgrading in the Northeast), and further, to have two of our routes combined, one cut entirely, and nothing added." As for DOT's broad proposal to cut out 43% of Amtrak's route miles, Gianturco urged its rejection: "The $166 million annually in so-called 'savings' which the 11,800-mile cutback will supposedly generate, would build only four miles of eight-lane urban freeway at today's costs. For the 1980s we think we need to have some real alternatives in transportation."

NYCTA POLLS ITS CUSTOMERS

The New York City Transit Authority this spring is distributing 1 million origin and destination questionnaires to its riders in what is described as "the most extensive survey of passengers ever undertaken by an urban mass transit system." In the $400,000 survey, which is funded by the Urban Mass Transportation Administration, riders are being asked such questions as how they reached the station, where they're going, the number of transfers required, and how they will get to their final destination. "A thorough analysis will be made of the information gained in this survey and other supplemental surveys," says NYCTA. "Preliminary plans for routes, schedules, and headways for the existing subway system will be developed, with the goal of providing more attractive and efficient transit service. Special consideration will be given to the analysis of, and possible improvements to, access to subway stations."

MAGLEV READIED FOR HAMBURG DEBUT. Visitors to the IVA International Transport Exposition in Hamburg, Germany, June 8-July 1 will be able to ride a magnetically-levitated vehicle over a 3,000-ft test track. Controlled electromagnets keep the vehicle, known as the Transrapid 05, hovering 10 millimeters above the guideway. At Hamburg, due to the relatively short track, the electric linear motor will accelerate the vehicle only to about 47 mph. Future long-distance maglev trains will be designed for speeds up to 250 mph. The prototype is being developed by a government-appointed consortium of companies including Krauss-Maffei, Messerschmitt-Bolkow-Blohm, and Thyssen Henschel. A 25-mile maglev track is now being built near Bremen for further testing.

Jack E. Heiss
C&W

William G. Cranmer
PFE

Robert G. Gehrz
Soo

Carl. N. Taylor
Itel

William F. Wilson
Wix Corp.

King Elliot
Metro Dade

People in the News

BOSTON & MAINE.—Thomas Davis, III appointed director-purchases and stores, No. Billerica, Mass., succeeding **William J. Britton,** who has retired upon advice of his physician, after 43 years with the B&M.

J.K. Geiger appointed director-car utilization and control, No. Billerica.

COLORADO & WYOMING.—Jack E. Heiss appointed chief engineer of this wholly owned subsidiary of **CF&I Steel Corp.** Mr. Heiss was formerly engineer of maintenance planning, Operating Department, **Rock Island.**

PACIFIC FRUIT EXPRESS.—William G. Cranmer, vice president and general manager, elected president and general manager.

SOO LINE.—Robert G. Gehrz, senior general solicitor, appointed vice president and general counsel, succeeding **Fordyce W. Crouch,** who retired Feb. 28, after 40 years with the Soo's Legal Department. **Harold J. Ness,** director of financial analysis, also elected treasurer, succeeding **Edward H. Etken,** retired. **Thomas J. Reader,** senior financial analyst, elected assistant treasurer.

Suppliers

Carl N. Taylor has been named president, Rail Operations Division, **Itel Corp.,** San Francisco. Mr. Taylor will have responsibility for all engineering, design and maintenance functions for the division's rolling stock and for management of four railroads owned by the corporation. Mr. Taylor was formerly vice president, rehabilitation planning and mechanical, **Conrail.**

William F. Wilson has been appointed sales manager-railroads, **Wix Corp.,** Gastonia, N.C., succeeding **William W. Eaton,** who retired in December.

Transco Inc. has elected **I.A. Thompson,** vice president, Railway Products Division, and **Jerry Keeley,** assistant vice president, RailCar repair division.

Kenneth M. Schneider has been appointed assistant vice president, **L.B. Foster Co.** He is also Detroit division manager.

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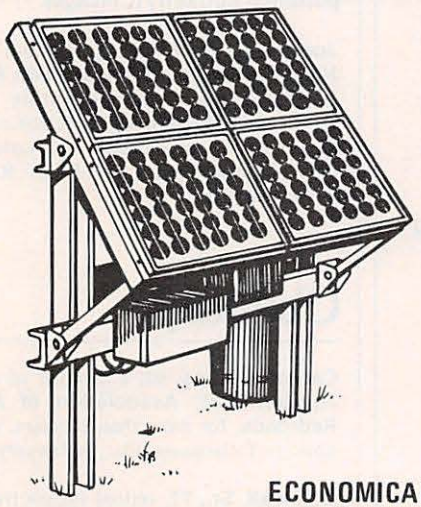

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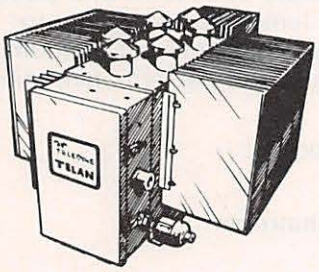

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Transit

King Elliott has been appointed chief of the newly created Communications Branch, **Metropolitan Transit Agency, Metropolitan Dade County,** Florida. Mr. Elliott was formerly assistant director of public affairs, Dade County Office of Transportation Administration. **Janet Martin,** public information officer, has been promoted to assistant chief, Communications Branch.

Alexandra Zetlin has been appointed director of media information services, **New York Metropolitan Transportation Authority.**

Don Eagles, special assistant in charge of public information and press relations, **Massachusetts Bay Transportation Authority,** has been promoted to director of public information, replacing **Ken Campbell,** resigned. **Francis W. O'Brien,** liaison officer to the Advisory Board, has been named chief liaison officer and advisor to the chairman. **Joseph P. Shea,** program development agent, has been named administrative assistant to the chairman. **Don Harrington,** assistant general counsel, has been named legislative counsel to the chairman. **James W. Hennigan, Jr.,** former Suffolk County register of probate, has been named legislative assistant to the chairman.

E. Richard Betz has been appointed president, Transit Systems Division, **Keene Corp., Chicago.**

David F. Girard-diCarlo, member of a Philadelphia law firm, has been elected chairman, **Southeastern Pennsylvania Transportation Authority,** succeeding **John M. Macmurray.** Mr. Girard-diCarlo was named to the SEPTA board by Pennsylvania Governor Dick Thornburgh. Long active in transit affairs, he served as editor in chief, American Public Transit Association's Transit Law Review.

Mary Elaine Zerler has been named senior public information officer, **Regional Transportation Authority (Chicago).**

Joseph R. Ciffa, public relations assistant, **Niagara Frontier Transportation Authority,** Buffalo, appointed community relations specialist for the authority's Metro Construction Division with responsibility for various publications dealing with the Light Rail Rapid Transit project.

Obituary

Carlton Corliss, 90, a member of the public relations staff, **Association of American Railroads,** for more than 20 years, died at his home in Tallahassee, Fla., in January.

O.T. Hall, Sr., 72, retired system trainmaster, **Seaboard Coast Line,** and senior associate for **M.L. Hall & Associates,** transportation consultants, died March 9 in Emory University Hospital, Atlanta, Ga.

Francisco Procel, 89, for many years a public relations officer for the **National Railways of Mexico** and an editor of NDM's magazine, *Ferronales,* died Feb. 2.

100 YEARS AGO IN

(April 3 and 10, 1879)

The railway has already penetrated into the Grand Canon of the Arkansas, in Colorado, and the track is now being laid in that tremendous cleft in the mountain known as the Royal Gorge. Where but lately the most adventurous tourist's foot had never dared to tread, the locomotive will soon hurry hosts of travelers on business and pleasure. Nature has few retreats which man's enterprise cannot penetrate.

* * *

The plan of many of the English railway companies for providing for the future of their employes by the means of funds made up in part by the company and in part by small deductions from the employes' salary, is an excellent one and should receive more consideration in this country.

* * *

An express train on the Grand Trunk road was thrown from the track, a few nights since, in consequence of the removal of a rail by some villains, the engine and three cars were wrecked, the engineer, fireman and a brakeman fatally injured, and several passengers were more or less seriously hurt. On the night of Sunday last, as we learn from a passenger, the St. Louis express coming north on the Wabash railway, when not far from Decatur, Ill., ran into a rail placed across the track and lashed to it. The engine was running at high speed, and had not the engine been new and unusually heavy, so that it withstood the shock and actually cut the rail in two, a serious calamity would probably have resulted. As it was, only the front part of the engine was thrown from the track. Here are two deliberate attempts at wholesale slaughter on leading railways, within a few days. It is hardly possible to conceive of a greater crime than that contemplated by the human fiends concerned in these deeds, and it will be a disgrace to the communities in which they were perpetrated if the wretches are not brought to terrible justice. Train wrecking is not a very uncommon crime, and yet when has it ever been punished as its enormity demands?

* * *

The prospect of a street railway on Broadway, New York, is now before the common council of that city. It is opposed, of course, by other street railway companies and by some property holders.

* * *

A bill is pending in the New York legislature which provides for tunneling the Hudson river, and permits the Erie, Pennsylvania Central, Delaware, Lackawanna and New Jersey Central railroads to have a terminus in the lower part of New York City. This terminus will be located below Fourteenth street, on the west side. The grade of the tunnel is to be two feet to the hundred feet, descending from the Jersey side, then three feet to the hundred feet, ascending from the New York side for 1,500 feet from the water's edge and from the water's edge two feet to the hundred. The top of the tunnel in the centre of the river, where there is a depth of sixty-two feet at ebb tide, is to be twenty feet below the river bed. It is estimated that the work will cost about $10,000,000 and the capital is ready and waiting for the passage of the bill. It is calculated that the running time from the depot in New York to Jersey City will be about four minutes and the distance two and a half miles. The construction of this tunnel will, it is claimed, greatly benefit the city by concentrating commerce through different lines of transportation as is effected in London by the Brunell tunnel under the Thames. Cars will load and unload at the depot there instead of in Jersey City. The time estimated for finishing the work is two years, and it will obviate, as is claimed, the great difficulty that has been so much complained of concerning the lack of terminal facilities in the metropolis for the above mentioned railroads.

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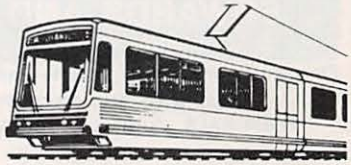

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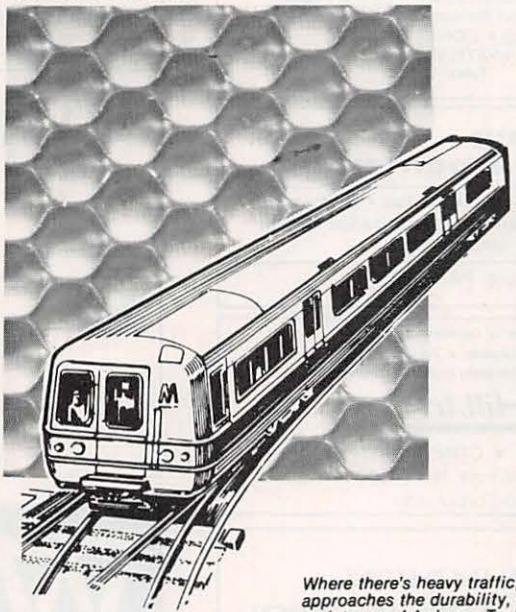

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Market

CARLOADINGS

Loadings of revenue freight in the week ended Mar. 17 totaled 473,162 cars, according to the Association of American Railroads. This was an increase of 52,122 cars, or 12.4%, compared with the corresponding week last year. Ton-miles generated by carloadings in the week ended Mar. 17 are estimated at 17.1 billion, an increase of 8.4% above the corresponding week of 1978. The increase over 1978 was attributed to a large extent to a sharp gain in coal traffic stemming from last year's UMW strike.

REVENUE FREIGHT CARLOADINGS

Commodity	Mar. 17 week	Mar. 10 week
Grain	23,483	21,884
Farm products	4,110	3,864
Metallic ores	27,203	29,646
Coal	103,899	97,714
Crushed stone, gravel & sand	15,304	15,049
Nonmetallic minerals	14,656	14,948
Grain mill products	18,028	17,810
Food and kindred products	19,249	18,486
Primary forest products	22,016	20,669
Lumber & wood products (except furniture)	12,054	11,447
Pulp, paper & allied products	21,269	20,552
Chemicals & allied products	32,421	30,459
Petroleum products	7,088	6,723
Stone, clay & glass products	18,533	17,660
Coke	7,564	7,840
Metals & products	19,500	18,864
Motor vehicles & equipment	26,876	25,907
Waste & scrap materials	15,546	14,595
Forwarder & shipper assn. traffic	14,431	14,069
All other carloads	49,392	47,721
LCL traffic	540	513
Total cars loaded	**473,162**	**456,420**
Cumulative total,	**1979**	**1978**
11 weeks	4,556,026	4,114,252
Estimated revenue ton-miles (billions)		
11 weeks	**168.5**	**156.1**

PIGGYBACK LOADINGS

U.S. piggyback loadings for the week ended Mar. 10 totaled 38,386 cars (5.0% above the corresponding 1978 week) and 69,170 trailers or containers (up 8.2% from 1978). Cumulative volume for the first 10 weeks of 1979 is 329,931 cars (up 0.1% from 1978) and 584,533 trailers or containers (up 1.9% from 1978).

CANADIAN CARLOADINGS

Canadian railway revenue freight loaded in the seven-day period ended March 7 totaled 4.6 million tons (down 4.1% from 1978). Cars loaded totaled 71,048 (down 3.9% from 1978).

● *AMAX, Inc.*—Ordered four narrow-gauge electric locomotives from GEC Traction of Britain for service at its Henderson, Colo., mine. The locomotives are two-axle, 62-ton, 1,400/600-V-dc chopper-controlled, and are scheduled for delivery in the spring of 1980.

● *Ann Arbor.*—Is acquiring 100 boxcars, valued at $4 million, under a lease arranged by the Michigan Interstate Railway Co. with Brae Corp. Michigan Interstate, owner of the Ann Arbor, has an option to acquire up to 200 additional cars for delivery in 1980.

● *CN Rail.*—Ordered 350 freight cars worth $15.5 million: 200 50-ft, 6-inch boxcars from National Steel Car for pulp and paper products transport, and 150 100-ton flatcars from Marine Industries for container traffic.

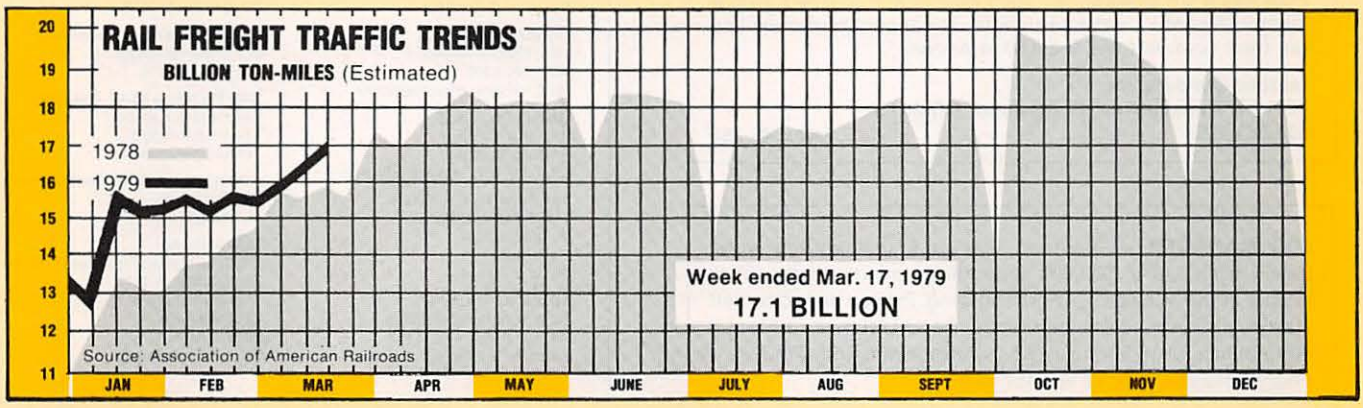
● *CP Rail.*—Ordered 65 100-ton, 65½-ft fixed-end gondola cars from Hawker Siddeley Canada Ltd. at an estimated cost of $3.3 million. The new order will bring CP Rail's fleet of cars used in steel product service to approximately 4,325.

● *CP Rail.*—Is installing 28 hotbox detectors at a cost of more than $2 million. When the program is completed late this year, CP Rail will have a total of 46 detectors on its lines.

● *Hawker Siddeley Canada.*—Recent freight car orders include the following (value in Canadian dollars): 500 covered hoppers for North American Leasing Co., $20 million; 500 covered hoppers for Itel and 800 for the Canadian Wheat Board, a total of $55 million; 240 boxcars for the Cameroons, $10.5 million; 30 ballast cars for Malawi, $1.3 million; 92 gondola cars and 15 tank cars for Togo, totaling $4 million. Hawker Siddeley's lines are now booked for the next 12 months.

● *Thailand.*—Received a $16.7-million loan from the World Bank to help finance a five-year, $100.9-million railway improvement program. The program contemplates acquisition of 30 1,800-hp diesel-electric locomotives and the building of 79 passenger and 103 freight cars. The locomotives will be purchased and financed in France and the Federal Republic of Germany. The cars will be built in the shops of the State Railway of Thailand with imported components; all items procured under the World Bank loan will be subject to international competitive bidding.

● *Urban Transportation Development Corp.*—Has received a $237,000 contract from Empresa Brasileira dos Transportes Urbano (EBTU) to provide transportation advisory services to four Brazilian state capital cities—Belo Horizonte, Porto Alegre, Recife, and Salvador.



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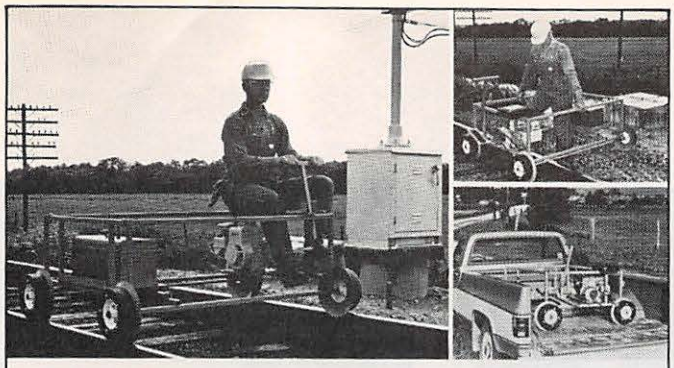

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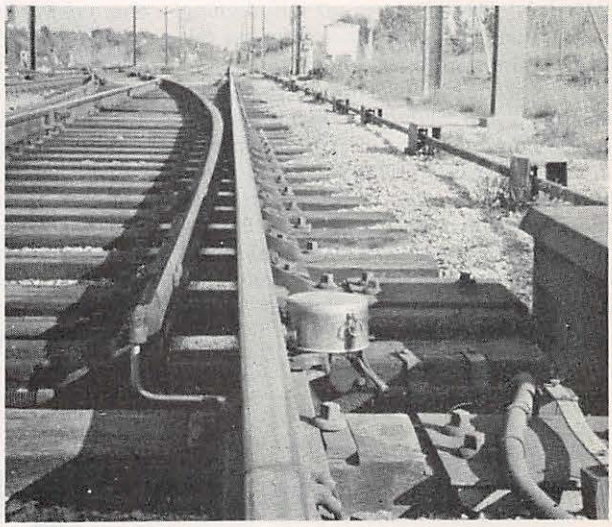

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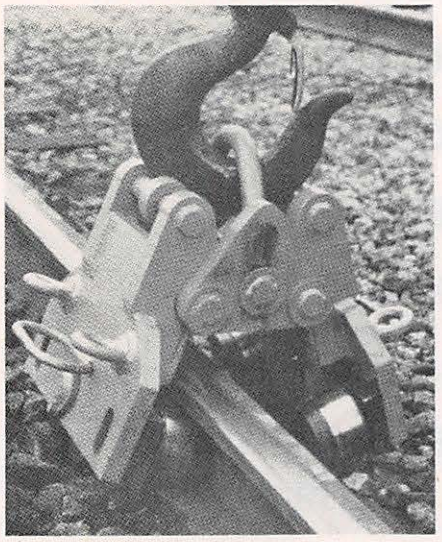
Products Report



Threader grabs rail for easier cwr laying

Laying of continuous welded rail is simplified by a new universal rail threader offered by Mitchell Equipment Corp. "Grab N' Thread" has four self-aligning rollers that ride under the head of the rail and require no support under the bottom surface of the rail, providing zero ground clearance and permitting laying of rail directly onto tie plates. Easily attached to or removed from the rail in any position, the unit eliminates need for a top-mounted winch on the crane. Upward pressure on the shackle actuates toggle links that close the threader securely, and a safety latch locks the threader in the closed position.

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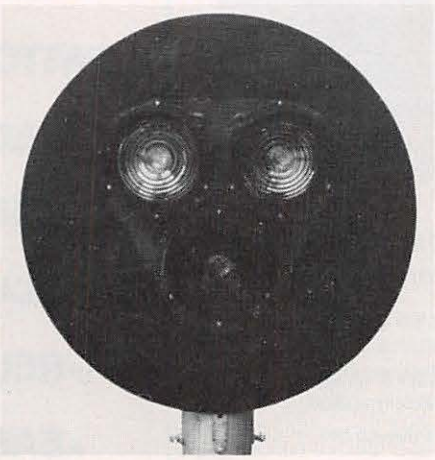

Type V signal can display one or more colored lights

A new Type V color Light Signal offered by Safetran Systems Corp. is capable of displaying one or more colored lights. Housing and doors are made of cast aluminum. Each unit has a doublet-lens combination that produces an aspect of one color. Furnished with optical arrangements for tangent track; roundels are available to adapt signals to curved track. Anti-phantom screens are available. The outer lens is an 8 3/8-inch doublet with a 4-inch focal length; inside colored lens is 5½ inches. Furnished with a single-contact candelabra, 2-pin, bayonet base lamp. Arrangements available for top of mast, side or front of mast, and dwarf mounting. Field alignment is accomplished by a peep-sight. Metal or plastic hoods and background available.

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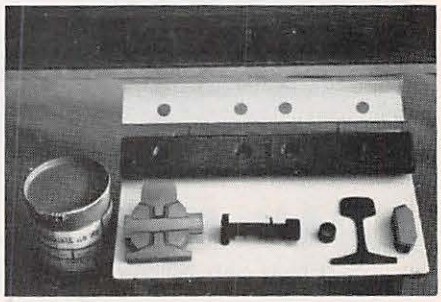

Insulated rail joint kit speeds on-site repairs

For in-track, on-site installation, a new insulated rail joint offered in kit form by U.S. Thermit, Inc., requires only grinding and cleaning of the fishing area at rail ends, preparation and processing of a synthetic-resin mortar, and installation of two fishplates, one end post, and six bolts (through insulated sleeves) plus washers and nuts. When completed, the insulated joint may be exposed to traffic in as little as 13 minutes, depending on ambient temperature. Characteristics of the insulated joint are said to be such that, if the bond between fishplate and rail should ever separate, the insulated bonding of the fishplate remains undamaged, enabling the joint to maintain its electrical resistance. The "Type M" joints are recommended for permanent installation as well as for emergency repairs.

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TRACK PAN SYSTEM. An 8-page, color-illustrated brochure describes Proform Inc.'s SFRP system.

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OIL RECOVERY Systems offers literature on its Scavenger portable oil-water separator for recovering floating oils, fuels, and other hazardous materials from the water surface at rates of over seven barrels per hour.

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"HAZARDOUS MATERIALS Transportation by Rail," a 32-page booklet reprinting the Code of Federal Regulations 49 Part 174, is offered for $1.50 per copy by The Railway Educational Bureau, 1809 Capitol Ave., Omaha, Neb. 68102.

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